

SCI-TECH NEWS

OFFICIAL BULLETIN

OF THE

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SCIENCE-TECHNOLOGY

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Volume 14 - No. 1

Spring - 1960

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SCI-TECH NEWS

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Division authors are invited to submit manuscripts for publication in SCI-TECH NEWS. Because of space limitations, articles should be limited to 1600 words and should be typed double-spaced on one side of the paper. Although every effort will be made to carry all valid articles received, space limitations may require some articles to be held for subsequent publication. Copy deadline is Feb. 1, April 15, Aug. 1 and Nov. 1 for the Spring, Summer, Fall and Winter issues.

SUBSCRIPTIONS

All Special Libraries Association members who elect to join the Science-Technology Division receive subscriptions to SCI-TECH NEWS. Their annual subscription fee of \$.50 is paid by the Division from the allotment of the members' dues by SLA to the Division.

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FROM SCI-TECH'S CHAIRMAN

C. K. BAUER



A large number of your officers, Committee Chairmen, Section, and Chapter representatives met in the Crystal room of the Hotel Sherman from 9:00 A. M. until 2:00 P. M. on Saturday, February 13, 1960 to report on Division accomplishments and to lay plans for future activities.

This is not to be considered the formal minutes of the meeting (the official minutes were recorded by Margaret Firth in the absence of our Secretary, Doris Banks) but rather a recounting of the highlights of some of the topics discussed and some of the actions taken so that the membership may be kept informed of Division activities.

Herb White's resume of the convention program indicated the Division, in conjunction with the Metals Division, would again provide the major subject contribution to the SLA Convention.

The advertising program of **Sci-Tech News** requires that a revised application for a second class postage permit be submitted. To meet postal regulations, the Advisory Committee specified that \$.50 of each member's dues allotment to the Division be set aside for the member's subscription to S-TN and that the treasurer's records should show the allocation.

Mike Friedlander summarized the action of the ASTIA Coordination Committee and presented a draft of a letter to Dr. York suggesting greater financial support for ASTIA, better placement for ASTIA in the DOD hierarchy, and the elimination of some of the restrictions prescribed by DOD policies on ASTIA products and services. The Chairman stated that he had recommended to the SLA Executive Council the establishment of a Documents Standardization Committee which, if successful, would eliminate one of the problems the ASTIA Committee had considered.

Joan Hutchinson reported that **Scientific Meetings** had a balance of \$2203.99 prior to transferring \$500.00 to the Division treasury. The group discussed the report that duplication did exist between **Scientific Meetings** and other similar publications, notably the LC publication of international meetings which is receiving National Science Founda-

tion (NSF) financial support. Users of the publication among the members of the Committee did not feel that the other services provided the coverage offered by **Scientific Meetings** and felt that the Division publication should be encouraged by NSF support, expanded scope, and better advertising of its availability.

Dr. Fertig, the recently appointed Chairman of the Awards Committee recommended the establishment of a "Science-Technology Award of Merit" to be bestowed annually for outstanding service. By paying tribute to our outstanding members we are not only honoring those to whom honor is due but are stimulating others in performing better service to our profession. The procedures and criteria will be evolved, it is hoped, in time for the first presentation to be made this year. Members of the Division are encouraged to submit suggestions for the nomination to Dr. Jolan Fertig as soon as possible.

After prolonged discussion of the Union List report presented for Philip Leslie by Efren Gonzales, it was decided that the project should be discontinued.

As a result of a suggestion made at the 1958 SLA Convention concerning the creation of an aeronautical information handbook, C. David Rife, a Lockheed librarian, compiled a world list of aero-space journals. The compilation was offered to the SLA Publications Committee for printing but was not accepted. The Division Publication Committee will explore it as a Division project.

The practice of having the First Vice-Chairman and Chairman-Elect serve as program chairman does little to prepare the incumbent to assume the functions of Chairman. Instead, the Committee felt that the program should be handled by a committee presided over by an experienced member, perhaps a former officer. The indoctrination of the Vice-Chairman would be more effective if he were to serve as Section and Committee coordinator.

Frances Stratton accepted the chairmanship of the 1960 Hospitality Committee.

The Committee reviewed correspondence between George Bonn of the New York Public Library and the Optical Society of America concerning the cover-to-cover translation publications sponsored so extensively by the National Science Foundation. It was decided that the Science-Technology Division should not enter into the controversy but that if NSF wished to survey the librarians' reaction to the translations it underwrites, the Sci-Tech membership roster should be made available to them for this purpose.

The membership in the Division, according to Carl Losse, as of February 9, 1960 was

2240. This is approximately 200 more than it was a year ago.

Leslie Poland, in his report on the Chemistry Section activities, stated that the Section had undertaken the compilation of Documentation Digest for **Sci-Tech News**. Miss Pinches is now in charge of "Subject Headings List in Chemical Engineering". While the project is nearing completion, it is not yet in final form.

The National Science Foundation Coordination Committee under Marguerite Ritchie considered the possibility of NSF support for such activities as **Scientific Meetings**, Documentation Digest, and a cumulated index of ASTIA reports. The Foundation's position is that if they are supplied a well documented statement of need, they will consider the feasibility of financial assistance.

The Special Classification Committee under Margaret Anderson was established to assist Margaret Hyslop's activity in gathering special classifications for deposit at Western Reserve. A letter will be sent each Section requesting assistance in locating additional lists.

Hubert Sauter reviewed the activities of the revitalized Engineering Section. A Monday business meeting and a Wednesday panel discussion have been planned for the Convention. Rebecca Taggart is exploring project possibilities for the Section. Walter Kee has submitted the Nomination Committee's slate. Subject heading lists and by-laws are being revamped. A bulletin is being planned for April and Barbara Lainhardt is analyzing the membership roster which is the largest of any Sci-Tech section.

It was recognized that many of the Engineering Section members had enrolled, not because they had an active interest in Engineering Section activities, but rather because they were entitled to a second section free of charge. To make Section membership more meaningful, Herbert White moved that: In the future Science-Technology membership should be limited to one free section affiliation. An additional charge will be assessed for additional section affiliations. Carl Losse seconded the motion and it passed unanimously.

The Division Chairman will notify SLA Headquarters and review the Division by-laws to determine if the motion will require their amendment.

Frances Stratton gave a summary of the New York Chapter group. The 341 members hold four meetings a year. Among other things, they have sponsored a course in Russian grammar and have asked the National Science Foundation for financial assistance in

(Continued on Page 11)

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USER EFFECTS OF ASTIA AUTOMATION

J. HESTON HEALD, Chief, Document Processing Division, Armed Services
Technical Information Agency, Arlington, Va.

A history-making announcement that the Armed Services Technical Information Agency (ASTIA) was setting its first stages of automation into motion was recently made by its Commander, Colonel Woodrow W. Dunlop, USAF. These first stages will be molded with later stages, now being developed, which will encompass many of the major operations of the Agency. It is history-making in the fact that it marks the beginning of automation, in actual application, of a bibliographic and service function the size and scope of ASTIA. It is expected that this new program in ASTIA will have considerable impact upon the dissemination of scientific information. The purpose here is to briefly relate the highlights.

ASTIA, serving as the scientific information center of the Department of Defense, is an activity of the Air Research and Development Command, USAF. ASTIA was established by direction of the Secretary of Defense and, with few exceptions, all the research and development information generated by the three military services is directed to its collections. This has resulted in receipt of technical reports numbering about 200,000 separate titles since mid-1953. This is commonly known in ASTIA as the AD collection (assigned the ASTIA Document numbers). ASTIA has many older reports but it is the more recent AD collection which is the first under automation and, along with current receipts, it is the collection with which this article is concerned.

In November 1958, Colonel Dunlop submitted a proposal to ARDC which would bring automation to ASTIA. This proposal was approved in June, 1959, and, for the past several months, ASTIA has been vigorously putting its plan into operation. As this is written, ASTIA has just started the first phase of its automation and is well underway with additional programming steps.

On 15 February, just past, a "ribbon-cutting" ceremony at ASTIA set in motion Remington Rand's new UNIVAC Solid State 90 Computer and ASTIA was "on-the-air."

To the users of ASTIA's services, there are now at least three changes readily apparent. They are (1) changes in the preparation of the **Technical Abstract Bulletin (TAB)**, ASTIA's announcement medium which appears semi-monthly; (2) change from subject

headings to descriptors, e.g., from the **ASTIA Subject Headings** to the soon-to-appear **Thesaurus of ASTIA Descriptors**; and (3) change to the use of punched cards for requesting reports.

TAB no longer carries corporate author and subject indexes in each issue. Instead, these will be cumulated into separately bound **Quarterly Cumulative Indexes**; the first of which will appear in April, covering the first six issues of 1960. At the end of the year, an **Annual Cumulative Index** will cover all twenty-four issues for the year. Numerical indexes continue to appear in each issue.

The TAB numbering system has changed. This started with the 1 January issue which was numberer U60-1-1. The "60" stands for the year, the first "1" for the quarter, and the second "1" for the issue in that quarter. The 15 January issue was U60-1-2. The first issue of the second quarter is U60-2-1, and so on. This numbering will be used as a reference key in the cumulative indexes.

Descriptors, in lieu of the former subject headings, are now being applied to all new reports as well as to the entire AD collection. It represents the most demanding task in the automation program.

In converting its bibliographic and information retrieval operations to an automated system, ASTIA has developed a **The Thesaurus of ASTIA Descriptors**. This Thesaurus, scheduled to be ready for distribution in May, will replace the **ASTIA Subject Headings** (Fourth Edition). Its approximately 7,000 entries represent a highly selective amalgamation of subject headings, their subdivisions and the Uniterns previously assigned to the ASTIA documents. The subject headings were ten times that number.

The Thesaurus includes "scope notes" (i.e., areas of inclusion, exclusion, and relationship) for specific descriptors. It will be the subject basis for the **Cumulative Indexes** to TAB and the principal guide for subject-matter approaches to the AD collections. Space does not permit a detailed explanation of the development of the Thesaurus and the descriptor system in ASTIA. The effort was known as **Project MARS (Machine Retrieval System)** and involved one and one half years of concentrated study, research, and application on the part of the scientific analyst staff in ASTIA. Much of the story is now

available in the recently released ASTIA report, **Automation of ASTIA: A Preliminary Report**. It may be requested from ASTIA by the number AD 227 000. This report also describes the mechanization procedures, the equipment, the daily run schedules, etc.

The change from subject headings to descriptors should have some explanation. The subject headings were developed for and applied to a manually operated conventional library catalog. Conservative use of these headings was necessary to keep the catalog within manageable bounds. One to three headings to a document was the usual range of use. Sub-divisions were used to add depth and definition. Thus, although there were only one to three headings as access points, these headings could be given varied meanings by addition of different sub-divisions.

Under automation, the physical boundaries are greatly extended. Eight to ten (or more) headings may be assigned each document. With this greater capacity and with the ability of our computer to correlate any two or more given terms, the descriptor concept—terms free from sub-division—seemed logical. Actually, the descriptors were derived principally from the **ASTIA Subject Headings**. The main headings were separated from sub-divisions and both were made descriptors. For example, let us cite the form subject heading "Electric meters - Shock resistance." Both the main heading, "Electric meters," and the sub-division, "Shock resistance," are now descriptors. This greatly increases our power of resolution since either descriptor can now be automatically coordinated with any other descriptor or combination of descriptors. It reduces, though it does not eliminate, the need to create new headings. This is important in that the published Thesaurus will always be more nearly up-to-date as a reference tool than the subject headings; and, in turn, the need for revision is reduced. The cleavage also gives all descriptors equal alphabetic approach. In the subject headings, a main heading was identified with all its sub-divisions but a sub-division was not identified with the main heading to which it had been added. The descriptor arrangement strengthens the retrieval or search capacities with a reciprocal approach.

A physical weakness of the list of subject headings was that it could grow without the addition of words: the list of descriptors cannot. It would be physically possible to create almost 6.5 million subject headings by combining all sub-divisions with each main heading. This would require nine volumes the size of the present Fourth Edition, **ASTIA Subject Headings**. This meant, of course,

more growth. All this was taxing the manual system. However, the computer stands ready to automatically make any combination.

When it is published, the **Thesaurus of ASTIA Descriptors** will be available to all ASTIA users. It will be an important key to TAB and to the Cumulative Indexes to TAB. In fact, as time goes on, any user can build himself a "desk copy" reference approach to the ASTIA reports by keeping a collection of TABs, Indexes, and the Thesaurus. Such a collection would be tantamount to maintaining source (corporate author), subject, and shelf list (AD numbers) card catalogs. It would also provide all abstracts, except those that are classified.

Still other changes are in the offing. In April, TAB will begin to appear in two sections. The first will include references and abstracts to only unclassified, unlimited reports. This second section will refer to classified and limited reports. The whole TAB will still be unclassified but the front part may now be detached and distributed separately in those instances where such is desirable.

On 30 June, magnetic tape units will be added to the computer and report bibliographies and answers to reference questions will be prepared automatically. Later, Randex configuration will be added; thus giving the capacity of random access, a feature which eliminates the sorting and merging functions and reduces machine searching time.

As for the punched card request form, it is essentially similar to the former ASTIA Form 1. It does permit several simplifications. A supply was mailed to all users in January and they became effective on 15 February. Certainly, this card simplifies life in ASTIA. It means the almost immediate and automatic checking of certified fields of interest, security clearances, contract connections, mailing addresses, etc. It also means automatic stock level control of both classified and unclassified reports. No longer will a shelf attendant have to look to see if a stock copy of a requested report is available. The computer will never send him the request if it is not. Instead, the request will go to reproduction where a copy is made.

Also in sight is the automatic print-out of the entire bibliographic citation to a report, including all descriptive elements and the abstract. This will make possible the automatic preparation of TAB and report bibliographies. In other words, with a speed of 600 lines per minute, USS90 will print out the entries in TAB or prepare a list of pertinent references it has selected from its store on a given subject field.

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MANUFACTURER'S LITERATURE

AN INFORMATION GOLD MINE

DR. SUSAN V. BILLINGSLEY, Technical Information Director
Interstate Electronics Corporation, Anaheim, California

The harassed engineer searching frantically for the characteristics of a piece of equipment may turn to the industrial librarian for help. Unfortunately, in a majority of cases, they are unable to help. The material that would provide the answer is available but most librarians are unaware of this fact or unwilling to use it. The answer lies in maintaining a manufacturer's literature file and retrieval system.

This literature contains a great wealth of information which cannot be obtained elsewhere. It is written at the level and in the form most useful to engineers. Moreover, this type of information is free for the asking. Admittedly, some data is available in handbooks, but a great deal more is not. Manufacturer's literature can supply this missing element.

Although individual engineers may maintain their own supply of frequently used catalogs, their collections cannot be extensive or comprehensive. Obviously, they frequently need information they do not have. Furthermore, they are not equipped to store this material nor should they take the time to keep this file current. A centralized master file reduces expensive individual maintenance efforts, besides keeping the information current and available. Additional groups such as management, sales and purchasing also need manufacturer's literature for studying competitors and for general information.

By maintaining manufacturer's literature, an industrial library can greatly increase its usefulness to an organization. Why then do most librarians shy away from it? Two basic reasons exist. One is that library schools do not teach librarians how to handle this material. The other lies within the nature of the materials themselves. Neither physical characteristics, publications nor distribution methods lend themselves readily to conventional library management. Nevertheless, the value far exceeds the extra effort.

An example of a technical library that is successfully using manufacturer's literature is at Interstate Electronics Corporation in Anaheim, California. This library occupies 2400 square feet of floor area with an adjacent security room and work area. It employs a full time experienced staff of four. The library collection is composed of two main sections. One is the standard technical li-

brary concerned with books, journals, reports, etc. The second is composed of manufacturer's literature. Approximately 35,000 brochures from 7,000 companies form the bulk of this collection. New materials are constantly being added to existing files at the rate of approximately twenty new companies per week.

There is a problem of deciding what literature belongs in the file. To create a list covering every contingency would be impossible, so that decision must be made by the individual librarian. However, as pointed out earlier, to be effective, the system must remain simple. At Interstate, the file contains general descriptive brochures, data sheets, facility brochures, dimensions, and operating instructions, literature such as instruction manuals, and servicing instructions for specialized equipment. Serials of technical value, such as the General Radio Experimenter, are incorporated in the regular technical collection.

Additional materials are included as part of this operation. A complete set of master tube manuals are kept up to date. A punch-card transistor index is maintained, and loose-leaf notebooks of transistor data sheets are filed both by manufacturer and number. Small samples are filed by manufacturer's name and cross filed by product. New product descriptions are kept in a separate file on 4 x 5 cards filed by product. These descriptions are usually cut from new product release sections of free magazines, glued to cards, classified and date stamped.

Obtaining manufacturer's literature is not a difficult problem. At first, the material was obtained by writing a form letter requesting information on all items including all data sheets, price, delivery, and local representatives. A list published in the Electronics Buyers Guide was used and components of interest were selected with the help of a project engineer and the assistant director of research. Since then the library has developed a card form for requesting information, and technical guidance in ordering or indexing is no longer needed.

New information is requested by scanning the new product selections published in the magazines. In addition, all the companies listed as manufacturers of a specific type of item in such guides as the EEM, the IRE di-

rectory and the Thomas Register are canvassed. Thus, if an engineer requests information on "tuning forks", and the library has only a few companies on file that make them, a letter is written to all the companies that are not represented. In this way the library is constantly adding to the depth and breadth of its collection. It has been discovered that once an item is requested it will be re-requested by some other individual involved in the engineering and design operation. Therefore, the information should be ordered immediately even though the initial need may have passed by the time the material is received.

The manufacturer's catalogs are physically filed in heavy weight folders. They are alphabetically arranged by name of manufacturers. The Thomas Register is used as a guide of alphabetical order when needed. Because many companies have similar names, the folder tags also contain the company address. Cross reference folders are made between companies and their divisions, between popular trade names and the companies that manufacture the items and for bulky items that are kept on separate shelves. Experience has shown that three copies of each item are needed since usage is heavy and losses are frequent.

The retrieval system for this collection evolved naturally. The literature, as previously mentioned, is filed alphabetically by manufacturer's name. It is then listed in a Roladex by subject. Each card contains a subject, filed alphabetically, with a list of companies that manufacture the item. Since the cards are detachable, it is easy to add new entries. At present there are 7000 subject cards with 30,000 entries on seven Roladexes. The manufacturer's terminology is used as the subject heading because this is the way an engineer will seek the item. The process is begun by

searching the Roladex which gives an indication of the material available in the library. If the desired information is not available, a search is instigated in such things as the IRE or the R & D Handbook to discover manufacturers who make the item and they are contacted. In this manner the file is constantly growing.

The two basic problems are loss and obsolescence. To counter loss, it is requested that an out card bearing the name of each borrower and description of item borrowed be placed in the folder from which it was removed. Although there is loss with this loose control, the item can usually be located when needed. The other alternative is to set up a numbering system which would be extremely difficult to handle with this type of literature, and furthermore, would be economically unsound. The file should be gone through at least once a year and all outstanding items called in. If they cannot be located, they will be reordered.

Obsolescence is guarded against by date stamping all materials. Again, the file should be checked at least once a year and all obsolete material and excessive duplication removed and misfiled items refiled. Engineers can, and usually do, help with this problem by notifying the librarian of obsolete items.

The cost of establishing a central manufacturer's catalog collection is largely the expenditure in clerical manpower. The cost of maintaining this collection is small. The savings to a company can be evaluated in terms of saving critical engineering time. However, to be of value, this collection must be kept current, and it must be easily retrievable by company names and by subject. This service can be performed successfully only by the industrial library.

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Librarians or Icemen

As few as ten years ago it would have seemed impossible to most librarians who gave the matter any thought at all, that they, as a group, would ever be threatened with technological unemployment. Even today it is not difficult to believe that most practising librarians do not feel so threatened — or if they do, are inclined to shrug it off and forget. After all, are there not still more jobs than librarians to fill them either now or in the foreseeable future? And who would dream of outsing the little, kindly, gentle lady from her well-worn seat behind the long charging desk — the little lady, who for too long has symbolized for the public the image and function of librarianship? Indeed, this too is written with a qualm or at least a suspicion of a qualm that it may be unduly alarmist.

Yet the specter or the still small cloud or what-you-will becomes ever more niggling as time passes, and the horizon as seen from this one vantage point, at any rate, more ominous. The matter seems worthy of open discussion.

What has happened and is constantly and more and more persistently happening to rouse this fear — if not for ourselves, than for our descendants or for librarianship as a profession — or perhaps only for those librarians who are working in scientific and technical libraries?

The tale is only too well documented on every side, and the facts are known — even if they have not been faced by us.

First the Flood, the ever-growing flood of printed matter — journals, reports, books, etc., etc. which was unleashed by World War II replace with which the, by now archaic, bibliographical control gates which had been erected, seem powerless to cope.

And with the flood and our correspondingly growing need-to-know (what with Soviet competition, etc.), our correspondingly increasing inability to learn.

And then the appearance on the scene of the physicists and chemists and mathematicians and electrical engineers and a host of other non-librarian specialists to come to our rescue with their clever "thinking" machines.

And there you have it! The machines — copying machines, data-processing machines, indexing machines. Machines and devices and systems for sensing, abstracting, speaking,

translating, circulating, storing, remembering, calculating, transmitting and retrieving. Machines and gadgets of all kinds for all purposes springing up on every side like dragon's teeth and now frighteningly legion — a veritable horde of advancing automata with alien, steely-sounding names like UNIVAC, RAMAC, CORIC, COMAC, HAYSTAQ and SEAC — ingenious, useful (even valuable), but dangerous, and unfeeling — brainlike but brainless, and certainly heartless.

And the new machine language! Words and phrases like "Uniterm" and "Minicard" and "peekaboo" and "encoding" and "randomizing squares" and "digital" — words and phrases mostly foreign to those of us (which includes most of us) who come from backgrounds where the English language and its literature is pronounced in the native tongue.

This therefore is the situation. We have been engulfed by a flood of literature; usurped by another flood of gadgets, and we wallow more or less helplessly, poorly equipped by predilection, education or experience to do anything about it.

Are we therefore threatened by technological unemployment? Might Western Reserve's information storage and retrieval device and others like it eventually remove us from the scene? Unfortunately, the signs point that way.

Unless, that is, we become "information scientists" or "documentalists" or "machinists" or some such other "ists", or better still, unless we retrain for degrees in mathematics or physics or patent searching or electronics. (These are admittedly admirable goals, but how many of us will achieve them?)

There are other ways however by which we can revive our rights and rescue our functions, but first we must assert the incontrovertible fact that **no** machine can **ever** replace the human mind and the inalienably human ability to serve as educators which we primarily are or as intermediaries between the printed, filmed or sound-recorded word and the users thereof.

Then, by the same token, we must recognize that the machine exists (and as it may someday be perfected), and enslave it to our purposes, rather than to permit the reverse to happen. It would be self-sacrificial to ignore or be remiss in doing so.

For one thing, library schools must incorporate the machine in all its aspects and

implications into their curricula. We must have knowledge of it in order to master it. We must learn the new language; speak the jargon along with engineers and physicists and chemists and operational analysts. We must let **them** teach **us**, as a matter of fact.

And we must also — and quickly — be more active in making the plans and decisions which these others are now making and which affect our work and our functions so severely. We must participate in conferences on "information storage and retrieval" in greater and more vocal numbers, and we must make our own contributions from the vantage point of our own peculiar education and experience and bias — to provide the human leavening for which no computer can compensate and the value of which no calculating machine can calculate no matter how "calculating" it may be.

Otherwise, it may well come to pass, as the evolutionary directions seems to indicate, that the book will give way to the "bit" buried deep in the magnetic core of a complex machine which has no human affinity and can be reached only by another complicated machine, and that we librarians (or our descendants) may someday walk the streets with the once flourishing iceman playing the protagonist in still another version of "The Iceman Cometh!"

From Sci-Tech's Chairman

(Continued From Page 4)

exploring the special library resources of the New York-New Jersey area.

Fenton Kennedy, in covering the activities of the Washington Chapter, said that a formal report would be prepared as soon as their business meeting is held.

Lois Brock is the Sci-Tech Convention Coordination Committee chairman. Any convention information should be forwarded to her. She is also responsible for the revision of the Procedures Manual and will write to all officers concerning changes which should be incorporated.

George Halpern reported that there are now 84 members of the Sci-Tech exchange group.

The Division Chairman felt that his report could best be stated in terms of the Section, Committee, and Group reports which had been made. After reiterating his concept that the Division, with its large and extensive membership, should take a stronger position in serving as spokesman for the science and technology librarian, the Chairman adjourned the meeting at 2:00 P. M.

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JOHANNA E. TALLMAN

Engineering Library, University of California, Los Angeles

(Author's Preface) I wrote this piece a number of years ago when I was struck one day by the humor inherent in some of the titles listed in an issue of *Births and Deaths in the Periodical World*. Adding a few more titles from my experience, I put together this bit of whimsy and sent it off to a library periodical. The editor sent me a polite reject, stating that this was not serious enough for his publication.*

Recently, when Frank Bennett asked me if I had anything to contribute to *Sci-Tech News*, I retrieved this from my stored collection — manually, of course. He accepted it with the hope that a bit of humor might provide a welcome change from the stereotyped language of this age of mechanized information retrieval.)

Pursuing a hobby is an almost universal activity; and librarians are no exception. Collecting books is an obvious choice. For example, Dr. Lawrence Clark Powell, bibliophile Librarian of the University Library at USCA, has a small study in his home, so he concentrates on small books, many of them gems of typographical and literary arts.

There are other bibliographical hobbies which can be not only exciting but, at the same time, be followed at absolutely no expense. Some librarians collect odd or interesting names which turn up on borrower's registration cards, such as Eliahu Ben Hur and Gene Shakespeare, one time users of our Engineering Library. This hobby even has a special name, "neumenology". A Cataloger can collect, or could before the days of simplified cataloging, involved examples of colation. Here's one: cxx, 2620(i.e.2632),256-(i.e.332)p. front.,illus.,plates (part col.,part double) ports.,maps,diagsr. This is for one of Webster's dictionaries.

Lately I've become interested in a hobby with a serial slant. In the course of my work a variety of peculiar or misleading citations to serial references come to my attention. Through devious detective work they are finally identified and added to my collection. Here are a few you can use to baffle your reference librarian colleagues, or you might pass them on to library school professors to spring on eager students. These cita-

*Humor provides a welcome relief from the stereotyped language of any aspect of literary literature. We regret that lack of appreciation delayed its publication but we are pleased to have the opportunity to carry it in S-TN. —GER.

tions were all found in the publications of reputable authors and publishers.

1. *Bl. Min. Eng.* 1443 (1919) E. F. Northrup.

This finally turned out to be: *American Institute of Mining and Metallurgical Engineers. Bulletin*, no. 152, Aug. 1919, p.1443-1444.

2. Barker & Kinoshita. The effect of the shape and surroundings of a hot surface on the radiation from it. *Bulletin no. 1, University of London*.

It didn't take so long to find a listing in the *Union List of Serials for: London. University College. Dept. of Heating and Ventilating Engineering. Bulletin*, no.1 (1923). But the trick was to find a citation which would definitely link the article by Barker to this *Bulletin*. It was finally located by going through issues of both *Engineer* and *Engineering* around 1923 and finding mention of this bulletin being published.

3. *Rec. Math. Moscow* 39, H. 4, pp. 141-151.

The "Moscow gives this away as a Russian periodical, and it becomes *Matematicheskii sbornik*. The abbreviation *Rec. Math. Moscou* is the official citation as given in the *World List of Scientific Periodicals*, although the entry is under the Russian title. It stands for *Recueil Mathematique*, the French title for the magazine.

4. *Maschinenbaunachr.*, Moskau, Bd. 28 (1948).

"Moskau" is again the clue and a bit of translating gives us *Vestnik mashinostroennia*. In this case, however, the German citation is merely the translation made by the author giving the reference, and does not appear on the Russian magazine.

5. *Proc. 5th Volta Congress, Rome*.

It may take you a little time to find this in ULS under: *Accademia d'Italia. Fondazione Alessandro Volta. Atti dei convegni*.

6. *Trans. CAHI, Moscow*.

The Russian citations seem to cause the most confusion, possibly because the official ULS entries are long and involved, and authors attempt to give as short a reference as possible. This is identified as: *Moscow. Tsentralnyi Aero-gidrodinamicheskii Institut. Trudy*. Translated, this gives us "Central Aero-Hydrodynamic Institute", or CAHI. See how easy it is for authors to create brief references?

7. *Soc. Chim.-phys.*

In this case, the "chim." is a clue as to a French connection. By looking in *Minerva*;

Jahrbuch der gelehrten Welt under Paris, this is revealed to be the *Journal de chimie physique*, published by the Societe de Chimie Physique.

8. TRRF. Inf. Bul.

This appeared in a refrigeration publication, and finally was identified as: *The Refrigeration Research Foundation. Information Bulletin*. Incidentally, the use of the letter T to stand for "The" is not uncommon. We have a publication called *TLARGI yearbook*, which stands for *The Los Angeles Rubber Group, Inc Yearbook*. We have not seen a citation to it yet, but expect to, one of these days.

While you are waiting for choice references to come your way, you might have some fun with the titles listed in the *Magazine Notes and Births and Deaths in the Periodical World*, issued three times a year in the *Bulletin of Bibliography*. From the July 1951 issue we learn that *Correct English* has been discontinued (ain't that awful!); *Freedom and Plenty* has temporarily suspended . . . and it is not certain when it will resume (we're not certain, either); *Zero* has been discontinued (what will the mathematicians do without it?) Even the *Common Cause* has discontinued. Authors are lucky for a while, since *Writer's Rejects* has temporarily suspended. If you are looking for hobbies and fun, you might try *Green Thumb*; *Here's How*; *Your Dog*; or even *Tour Italy*. If all of this does not entice you, the magazine for you is *Why*. You realize, of course, that all of this is pure fantasy, since the July 1950 issue of *Magazine Notes* had already announced that *Here and Now* has discontinued.

You can readily see that serials can be fun, and you, too, can become a "Serbiobiblist"—you guessed it, *Serials Bibliographical Hobbyist*.

User Effects of Astia Automation

(Continued From Page 7)

All this means an extended effort by ASTIA to improve and speed up its services. In this connection, and quite apart from the computer, ASTIA is now changing from 16mm to 35mm microfilm. This will improve the capability for reducing reports supplied in poor copy. It will also make possible the supply of reproductions in single—rather than double—page sheets. Even the automatic reproduction of entire reports appears to have possibilities ahead.

Finally, ASTIA feels it must be dedicated to the continuing task of improving the communication of scientific information, with the particular objective being to bring the originators of information ever closer to the persons who need that information. The path is not easy, but the challenge is exciting.

Advertisement

We have noticed that the distillers are selling Irish Whiskey and Qantas is publicizing trans-Pacific flights with wordy-ads of this sort. While we aren't booking any flights to Australia nor serving as a middle man between the Irish distillers and those with a taste for the bog flavored spirits, we would like to try our hand at writing copy of this sort, even if it costs a little money.

With all due pride and no humility whatsoever we proudly confess that we were the book dealer who provided the cooperation noted by your editor on p. 3 of the Summer 1959 issue of SCI-TECH NEWS. We read the article three times, found the AEDC Library mentioned four times, but our identity was completely hidden behind the rather vague reference to "the Nashville store." We would hate to remain anonymous. Especially in our business.

A New Orleans book store owner who thought he might like to try the system did write us for more details. That inflated our pride but didn't help our exchequer. We would much rather hear from a librarian, especially from one who has been experiencing difficulty in getting expedited delivery of in-print books from domestic publishers and wants better service.

If you have lost your Summer 1959 issue of SCI-TECH NEWS write us for information on the system. Write us anyway, because, in addition to our name being completely deleted from the account, there are a few details we would like to correct. One of which is the impression that all orders are sent to the publishers. They aren't. Even a large number of the esoteric needs of the AEDC Library are filled from our rather completely stocked shelves.

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BIBLIOGRAPHY DIGEST

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ANTENNAS

1. **Antennas and waveguides, as annotated bibliography.**

H. V. Cottony, R. S. Elliot, J. C. Jordan et al. INST. RADIO ENG. TRANS. AP-7:87-98, Jan. 1959.

Recent developments in several areas are summarized, followed by listings of pertinent references.

2. **Bibliography on the helical beam antenna.**

J. Y. Wong and R. S. Thomas. Ottawa, National Research Council of Canada, Radio and Electrical Engineering Division, May 1959. 22p. (Rept. ERA-344; N. R. C. (5264) (AD 225 164) (PB 142 876).

This report contains 66 abstracts of papers and reports for the purpose of providing a ready source of information to workers in the field.

BERYLLIUM

3. **Beryllium: A search of the unclassified literature.**

Wanda G. Bradshaw. Palo Alto, Calif., Lockheed Aircraft Corp., Nov. 1, 1959. 58p. (LMSD 2260) (Contract Nord-17-17) (PB 161 012).

Includes 241 references on fabrication, cladding, purification, properties, corrosion resistance, interdiffusions, alloys, and toxicology.

4. **Beryllium health hazards and protection.** U. R. M. Chadwick. Risley, Lancs., England. U. K. Atomic Energy Authority, Industrial Group H. O., May 2, 1959. 31p. (IGIS-37(RD/R))

Comprehensive selection of about 222 references to classified and unclassified literature. Includes a selection of general references on the properties, uses, and fabrication of the metal.

5. **Toxicity and other hazards of beryllium and rocket propellants, literature search.** William E. Bost. Oak Ridge, Tenn., Atomic Energy Commission, July 1959. 11p. (TID 3531)

Seventy-three references to unclassified reports on the toxicity, occupational hazards, and safety measures regarding beryllium and certain rocket propellants, chiefly boron compounds.

CERAMICS

6. **An investigation of the theoretical and practical aspects of the thermal expansion of ceramic materials. Literature survey. Volume I.**

Raymond H. Stutzman, John R. Salvaggi and Henry P. Kirchner. Buffalo, N. Y., Cornell Aeronautical Laboratories, Aug. 1959. 157p. (Rept. PI-1273-M-4) (Contract Nord-18419) (AD-220 685)

As a result of a literature survey conducted on reversible thermal expansion of crystalline ceramics, rocks and minerals, glasses, cermets, intermetallic compounds, salts, cements, glazes, enamels and ceramics combined with other materials, 954 references were collected for a bibliography.

7. **Selected abstracts on the mechanical behavior of ceramics.**

Compiled under the joint sponsorship of the U. S. Army Ballistic Agency and the U. S. Army Office of Ordnance Research in cooperation with the North Carolina State College, Department of Engineering Research. Raleigh, N. C., North Carolina Engineering School, Jly. 1959. 160p. (Bull. 73)

This book, which includes 334 abstracts of papers and books, with a total, including cross citations, of 637 entries under 19 subject headings, brings together a large amount of material under one cover.

COPPER

8. **Copper and copper alloys: A survey of technical progress during 1958.** E. Voce. METALLURGIA 59:88-92, 131-138, Mar. 1959.

A digest based on 303 references.

9. **Literature survey on copper base alloy castings for gas and hydrostatic pressure applications.**

Vincent De Pierre and Shingo Inouye. Washington, D. C., U. S. Naval Weapons Plant, May 15, 1959. 40p. (Rept. NGF T-30-58) (NAVORD Rept. 6484) (AD-219 362)

Defects responsible for leakage in pressure castings, alloys generally used in bronze pressure castings and major factors (melt quality, composition, pouring temperature, mold variables, casting section thickness, and machining) influencing the pressure tightness of these alloys are reviewed in 85 references.

DIFFUSION

10. A new apparatus for liquid phase thermal diffusion. (Thesis).

Edward Von Halle. Oak Ridge, Tenn. Oak Ridge Diffusion Plant, June 24, 1959. 363p.

An annotated bibliography on all phases of thermal diffusion containing 690 references is included. Available from OTS.

11. Survey of recent work on the viscosity, thermal conductivity and diffusion of gases and gas mixtures.

P. E. Liley. In *Thermodynamics and Transport Properties of Gases, Liquids and Solids*. Papers presented at the Symposium on Thermal Properties, February 23-25, 1959, Purdue University, Lafayette, Ind., New York, American Society of Mechanical Engineers, 1959. p. 40-69.

A bibliographic listing of 550 references is given.

12. Thermal diffusion: A bibliography.

G. R. Grove. Miamisburg, Ohio, Monsanto Chemical Company, Mound Laboratory, Nov. 14, 1959. 56p. (Rept. MIM-1088)

Authors, titles and standard references of over 900 foreign and domestic publications from 1856 through 1957 are listed.

DOSIMETRY

13. Bibliography for this report on high-level dosimetry.

NUCLEONICS 17:75-76, Oct. 1959.

About 200 non-annotated references, mostly in English-language periodicals.

14. Photographic dosimetry: an annotated bibliography.

R. W. Brisbane and L. B. Silverman. Los Angeles, University of California, School of Medicine, Department and Laboratories of Nuclear Medicine and Radiation Biology, Sept. 15, 1959. 212p. (Rept. 446)

This is a list of 501 annotated references, by author, to report, book and journal literature concerning quantitative evaluation of radiation dosage by means of photographic films and nuclear emulsions. A subject index is included. Available from OTS.

FATIGUE

15. Bibliography on thermal stresses and low-cycle fatigue.

D. R. Miller. Schenectady, N. Y., Knolls Atomic Power Laboratory, Aug. 20, 1959. 33p. (Rept. KAPL-2048) (Contract W31-109-Eng-52)

This bibliography of about 200 entries consists primarily of references to domestic publications on stresses and fatigue in nuclear reactors and power apparatus. Arrangement is by the following groupings: material tests data, service experience and component tests, stress analysis, design, and miscellaneous. Available from OTS.

16. Historical development of research on the fatigue of materials and structures.

J. Y. Mann. AUSTRALIAN INST. METALS J. 3:222-241, Nov. 1958.

Development of fatigue research from 1829, based on 148 references.

FISSION

17. Bibliography on fission, 1952 to present.

P. E. Bell and S. R. Harris. Los Alamos, N. Mex., Los Alamos Scientific Laboratory, May 29, 1959. 208p. (Rept. 2302)

A non-annotated listing, alphabetically by author, of 1,012 references obtained from a search of Chemical Abstracts, Nuclear Science Abstracts, Physics Abstracts and Los Alamos Scientific Laboratory Report Library card catalog.

18. Fission products decay energy. A literature search.

James M. Jacobs. Oak Ridge, Tenn. Atomic Energy Commission, Technical Information Service Extension, Sept. 1959. 9p. (TID-3536)

Seventy-five unclassified reports concerning energy release in various forms from irradiated materials are cited. Available from OTS.

19. Literature survey of the properties of fission product oxides, fluorides and oxyfluorides.

G. Tennenhouse and M. J. Steindler. Lemont, Ill., Argonne National Laboratory, Jly. 30, 1959. 75p. (Rept. RCV-SL-1545)

Only the dry chemistry of the materials is covered. Thermodynamic properties, heats, and free energies of formation are included. Available from OTS.

FLUIDS

20. Fluid dynamics.

A. K. Oppenheim, C. V. Sternling, Jr. and R. A. Stern. INDUS. ENG. CHEM. 51:437-452, Mar. 1959.

Review of recent literature on equations of motion and stability, turbulence, vortex flow and rotation, jets and wakes, flow near solid surfaces, multiphase and free-boundary flow, gas dynamics, wave dynamics, dynamics of reactive fluids, dynamics of conducting fluids. A bibliography arranged under the foregoing headings contains 329 references.

21. Molecular transport properties of fluids.

E. F. Johnson. INDUS. ENG. CHEM. 51:399-401, Mar. 1959.

Sixty-six references are included in this review of literature published since October 1957 on the viscosity and thermal conductivity of homogeneous fluids.

HYDROGRAPHY

22. Bibliography on tidal hydraulics. Supplementary material compiled from May 1957 to May 1959.

Vicksburg, Miss., U. S. Army Engineer Waterways Experiment Station, Corps of Engineers, May 1959. 108p. (Rept. 2, Suppl. 3)

This supplement consists of about 285 English-language references arranged alphabetically under the following headings: theoretical considerations, sedimentation, salinity effects, contamination, regulation and improvement, laboratory experiments, surveys and instruments, and basic physical data.

23. Water waves. VI.

J. V. Wehausen. Berkeley, Calif., University of California, Institute of Engineering Research, Jly. 1959. 58p. (Series 82, Issue 10) (Contract Nonr-222(30))

Sixth and last part of an article on Water Waves being prepared for new edition of Encyclopedia of Physics (Handbuch der Physik) contains a bibliography of about 600 non-annotated references to book and periodical literature in English and several foreign languages.

IONOSPHERE

24. Abstracts of articles on ground backscatter propagated by the ionosphere.

A. K. Brown. Stanford, Calif., Stanford University, Electronics Laboratories, Jly. 28, 1959. 20p. (Tech. Rept. 4) (Contract Nonr-225(33))

Sixty-nine references to published literature, mostly journal articles, arranged alphabetically by author.

25. Abstracts of articles on irregularities and horizontal motions of irregularities in the ionospheric F-region.

A. K. Brown. Stanford, Calif., Stanford University, Electronics Laboratories, Jly. 20, 1959. 73p. (Tech. Rept. 3) (Contract Nonr-225(33))

About 150 annotated references to journal articles, arranged alphabetically by author in one section, and chronologically (without abstracts) in another section.

ISOTOPES

26. Bibliography of the stable isotopes of oxygen (O^{17} and O^{18}).

David Samuel and Fritz Steckel. New York, Pergamon Press, 1959. 229p.

References to papers published up to the end of 1957 are included, excluding nuclear reactions. Arrangement is alphabetical by author. There is a subject index.

27. Industrial uses of isotopes, chemical reaction mechanisms and kinetics, and radio-chemistry. A selected list of references.

J. A. McCormick. Oak Ridge, Tenn., Atomic Energy Commission, Technical Information Service Extension, Sept. 1959. 87p. (TID-3079)

The 417 references in this bibliography were selected from the 1957 to 1958 open literature. An author index is included, as is an isotope index, and a graphical depiction of typical applications.

28. Isotopic power and thermionic conversion.

R. L. Scott. Oak Ridge, Tenn., Atomic Energy Commission, Technical Information Service Extension, Dec. 1959. 10p. (TID-3540)

Includes 88 non-annotated references on thermionic conversion of heat energy and the use of radio-isotopes as power sources. References on thermo-electric conversion are included if the primary energy source is a radioisotope.

29. Surface phenomena in solids—a literature review.

G. C. White and S. Helf. Dover, N. J., Picatinny Arsenal, Feltman Research and Engineering Laboratories, May 1959. 34p. (Tech. Rept. 2566) (AD-208 231) (PB 151 846)

Section 3 is devoted to a 103-item bibliography on applications of radioactive isotopes to the study of surface phenomena.

PLASMA

30. Bibliography of plasma physics and related subjects.

M. Stollenwerk. Tullahoma, Tenn., Arnold Engineering Development Center, Feb. 1959. 74p. (Rept. TM-59-5) (Contract AF40(600)-700) (AD-211 155)

A comprehensive annotated listing, in four sections, of periodical articles and reports dating from the 1920's.

31. Bibliography on plasma physics and magnetohydrodynamics and their applications to controlled thermonuclear reactions.

James D. Ramer and others. College Park, Md., University of Maryland, Engineering and Physical Sciences Library, Oct. 1959. 105p.

Non-annotated literature references, numbering 1,707 items, from 1937 to 1959, arranged alphabetically by author.

32. Oscillating electromagnetic field interaction with, and containment of, plasmas. A bibliography.

F. B. Knox and C. S. Sabel. Harwell, Berks., England, U. K. Atomic Energy Authority, Research Group. Atomic Energy Research Establishment, June, 1959. 34p. (AERE Bib. 121)

References, arranged alphabetically within each year, are taken from Science Abstracts, Section A and from Nuclear Science Abstracts, 1950-1959. There is an author index.

33. MHD bibliography.

G. Borman and A. Sherman. Cincinnati, Ohio, General Electric Company, Flight Propulsion Laboratory, Plasma Propulsion Unit, May 1959. 14p.

182 references including 22 from Russian sources, offer according to the compilers, "a fairly good coverage" of magnetohydrodynamics as applied to space propulsion.

34. Pulsed plasma propulsion. An advanced reaction space propulsion system. Summary of literature survey.

Thomas L. Hourson. Chicago, Ill., Borg-Warner Corp., Apr. 1959. n.p. (WADC Tech. Rept. 59-194) (Contract AF33(616) 6036) (AD-212 838)

A bibliography of 276 references is appended.

35. Research study of plasma acceleration. Final report.

G. Fonda-Bonardi. Beverly Hills, Calif., Litton Industries of California, Sept. 30, 1959. v.p. (AFOSR Rept. TR-59-170) Contract AF49(638)345)

A bibliography of 207 references on pertinent magnetohydrodynamics research and related subjects is included.

36. A review of the literature of plasma physics.

Eugene E. Covert and Keith Kerney. Cambridge, Mass., Massachusetts Institute of Technology, Naval Supersonic Laboratory, Jly. 1959. 176p. (WADC Tech. Rept. 373) (Contract AF33(616) 5693)

Includes an extensive listing of references to periodical articles, technical reports and books arranged in subject groupings.

REFRACTORY MATERIALS

37. High-temperature properties and alloying behavior of the refractory platinum-group metals.

R. W. Douglass, F. C. Holden and R. I. Jaffee. Columbus, Ohio, Battelle Memorial Institute, Aug. 14, 1959. 128p. (NP 7856) (Contract Nonr-2547(00))

A selected bibliography is included with major emphasis on the four more refractory metals: rhodium, iridium, osmium, and ruthenium.

38. Refractories bibliography, 1947-1956.

Joint Refractory Committee of the American Iron and Steel Institute of the Refractories Institute. Norman, Okla., University of Oklahoma Press, 1959. 1826p.

Contains over 9,500 references to periodical literature and patents relating to raw materials, manufacture, properties, and uses. All phases of industrial uses have been covered, including glass, petroleum, foundry, iron and steel industries.

39. Refractory metals and their alloys. A literature search.

T. F. Davis. Oak Ridge, Tenn., Atomic Energy Commission, Technical Information Service Extension, Jan. 1959. 10p. (TID-3524)

Included are 93 references to unclassified AEC and non-AEC reports. Materials covered include those with reasonably high melting points. Available from OTS.

SEMICONDUCTORS

40. Investigation of organic semiconductors.
G. P. Brown and S. Aftergut. Schenectady, N. Y., General Electric Co., 1959. 31p. (Quart. Prog. Rept. 1) (Contract AF 33(616)5949)

The literature, including 60 references, has been reviewed and brought up to date from an earlier survey (Organic Semiconductors: Literature Survey, by E. M. Boldebeck. Rept. 56-RL-1490, 49 references, Mar. 1956)

41. Literature on InSb and device applications.

R. Willardson, F. J. Reid and others. In their Indium Antimonide for semi-Conductor Device Feasibility Studies, May 1 to July 31, 1959, Appendix I, Columbus, Ohio, Battelle Memorial Institute, 1959. (Sci. Rept.1) (Contract AF33(616)-6450)

Includes 301 listings on the subject in general and on materials, properties, devices and patents.

42. Semiconductors and solid-state bibliography

SEMICONDUCTOR PROD. 1:47-49, Sept./Oct., 48-50, Nov./Dec. 1959; 41-43; Jan. 1959, etc.

A continuing record of current material, with brief annotations.

43. Studies on low conductivity, high stability, semiconductor film resistors.

F. Collins. Niagara Falls, N. Y., Speer Carbon Company, Research Laboratory, Sept. 30, 1959. 46p. (Rept. CRR-1) (Quart. Prog. Rept. 1) (Contract DA36 (039)-sc-78963)

Research on materials and techniques for the production of film resistors over a wide, easily adjustable resistance range having a low temperature coefficient of resistance. An extensive annotated bibliography covering the period 1947-1959 is included as an appendix. Articles on methods of preparation, structure, and electrical characteristics of semiconductor materials, in the form of their films, are cited.

SPECTROSCOPY

44. Bibliography on analytical flame spectroscopy 1956-March 1959.

R. Mavrodineanu. APPLIED SPECTROSCOPY 13:132-139, 149-155, 1959.

This bibliography of 766 non-annotated references continues an earlier work of 925 references covering the period 1948 to 1956 (APPLIED SPECTROSCOPY 10:51-64, 137-149, 1956)

In addition to references pertaining to the subject designated, a limited number of papers on unusual flames, mass spectroscopy applied to flames, flame temperature measurements and free radicals in flames are also included.

45. Spectroscopy.

M. Kent Wilson and Victor A. Crawford. ANN. REV. PHYS. CHEM. 9:339-358, 1958.

A review, based on a literature survey concluded in mid-January 1958, is presented. These topics are treated: rotation spectra, vibration spectra, and intensities. Includes 207 references.

THORIUM

46. Thorium and thorium compounds.

D. I. Ryabchikov and E. K. Gol'braikh. USPEKHI KHIM. 28:408-435, Apr. 1959.

In Russian. Preparation, properties and uses are discussed in a detailed review including 288 references.

47. Thorium toxicology. A list of selected references.

Hugh E. Voress. Oak Ridge, Tenn., Atomic Energy Commission, Technical Information Service Extension, May 28, 1952. 10p.

Twenty-one references covering effects of thorium on both laboratory animals and man, from the standpoint of chemical and radioactive toxicity. Some information on tolerance calculations and permissible limits is also included.

TURBULENCE

48. Clear air turbulence. Final report.

Joseph Clodman and John T. Ball. New York, New York College of Engineering, June 1959. 48p. (Rept. AFCRC TR-59-260) (Contract AF19-(604)3068) (AD-220 418) (PB 143 188)

The literature, including 51 references, is reviewed critically.

49. Turbulence measurements.

Leslie S. G. Kovaszny. APPL. MECH. REV. 12:375-380, June 1959.

Includes 102 references (non-annotated) on hot-wire turbulence research.

URANIUM

50. Bibliography on uranium alloys: with binary phase diagrams and selected data on properties.

Helen C. Friedemann and Henry H. Hausner. Bayside, N. Y., Sylvania-Corning Nuclear Corp., 1959. 67p. (Rept. NP-7902)

This bibliography contains 470 references.

51. Bibliography on uranium dioxide.

Henry H. Hausner. Prepared for, and available from, Gladding, McBean and Co., 2901 Los Feliz Blvd., Los Angeles, Calif., Mar. 1959. 23p.

Gives properties of uranium dioxide; contains 294 references arranged alphabetically by author. Also available from OTS.

VIBRATION

52. A bibliography and abstracts of reports on resilient mountings.

P. J. Shovestul. Annapolis, Md., Naval Engineering Experiment Station, Mar. 25, 1959. 61p. (Rept. 8 20052) (AD-215 988)

A bibliographic review of all EES reports, with abstracts, published to date covering development, investigation and evaluation of resilient isolation mountings for vibration control.

53. Bibliography on shock and shock-excited vibrations, Volume II.

J. N. Brennan, ed. University Park, Pa., Pennsylvania State University, Jan. 15, 1958. 191p. (Tech. Rept. 6) (Contract DA-19-129-QM-804)

Part 1 contains abstracts of 415 technical papers mainly from journals of technical societies. Part 2 includes references to 537 documents available to qualified users through ASTIA. Information is included on theoretical and analytical methods, experimental methods and equipment, measurement and

instruments, properties of materials, characteristics of structures, isolation and packaging, and miscellaneous. An author index, a subject index and details of the scope of the search may be found in the appendix. Author and subject indexes for Volume I and II combined are included in a pocket inside the back cover.

54. Cushioning materials for packaging: bibliography.

Frances Staachwitz. Albuquerque, N. Mex., Sandia Corp., May 1959. 18p. (Rept. 81) (Contract AT(29-1)-789)

In this brief bibliography the emphasis is on new cushioning materials for packaging and on environmental testing and performance of these materials. The survey is not intended to be exhaustive. Available from OTS.

55. A representative bibliography of research in low-frequency mechanical vibration.

V. H. Schaefer and R. G. Ulmer, Fort Knox, Ky., U. S. Army Medical Research Laboratory, Aug. 13, 1959. 30p. (Rept. 405)

Bibliography of vibration research dealing with whole-body vibration, organized in sections on pathology and lethality, physiology, behavior, and theory and measurement. Includes 188 references, with no intent to be exhaustive.

VISION

56. Daylight visual target detection (a search and review of the literature).

Charles M. Kulp and George E. Rowland. Haddonfield, N. J., Rowland and Co., Jly. 28, 1959. n.p. (Rept. R. & C. 59-1-1) (Rept. NAMC-ACEL-408) (AD-225 885)

An appendix lists 476 citations, 237 of which are annotated. Sources include both military and civilian literature.

57. Vision in military aviation.

Joseph W. Wulfeck, Alexander Weisz and Margaret W. Raben. Medford, Mass., Tufts University, Institute for Applied Experimental Psychology. Nov. 1958. 394p. (WADC Tech. Rept. 58-399) (Contract AF33(616)-2906) (AD-207 780) (PB 151 653)

A comprehensive bibliography (2268 references in all) is included in each section of the report for those who are interested in a more detailed approach to a particular subject.

X-RAY

58. X-ray equipment.

M. M. Umanskii. PRIBORY I TEKH. EKSPT. 3:3-17, May/June 1959.

In Russian. This is a review, with 66 references, of equipment used in various fields of research and industry. X-ray detectors are described, and diffraction procedures, microscopy, and various methods of material testing and analysis are discussed.

59. X-ray fluorescence. A review.

F. Brown. ANALYST 84:344-355, 1959.

A review with 77 references. Topics covered include X-ray spectra, development and general principles of X-ray spectrometry, equipment, quantity, applications and future developments.

SECTION, CHAPTER & COMMITTEE NEWS

Compiled by

REBECCA L. TAGGART

Each Section, Chapter and Committee should keep the Sci-Tech membership advised of its activities, programs and plans by regularly publicizing them in *Sci-Tech News*. Copy for inclusion in this feature should be sent to Rebecca L. Taggart, Librarian, School of Aeronautical Engineering, Purdue University, Lafayette, Indiana one week in advance of *Sci-Tech News* copy deadline date.

Rebecca has just accepted the responsibility for the compilation of future issues of this feature. Readers are encouraged to assist her in making this the most avidly read section of the publication. But to do this requires cooperation. Remember, we, on the editorial staff, do not make the news, we only report it and we have to find out about it before we can do that.

CHEMISTRY SECTION

Leslie B. Poland, Chemistry Section Chairman asked us to publicize in the Winter issue his interest in locating appropriate projects for his Section to undertake. We didn't actually short-circuit his request; we published it. But we had an unfair edge on anyone else who might have wanted to make a suggestion. We needed a compiler of Documentation Digest to take up the magnificent job which Gertrude Schutze had performed during the preceding ten years. Even before the copy was set in type, our suggestion was in the mail.

With the concurrence of his Section officers, Poland accepted the invitation and rounded up 19 volunteer abstractors to assist in continuing the feature. Some of the journals reviewed by Miss Schutze are not readily available to the abstractors.

If the completeness attained by Miss Schutze is to be approached, additional volunteers are needed. Will any reader who is in a position to abstract one or more of the following publications please contact Poland at Ethyl Corporation, 1600 W. Eight Mile Road, Ferndale 20, Detroit, Michigan:

Air Force, ALA Bul, Am Archivist, Alluminio, Atom, Australian Lib J., Babel, Bibliothekleven, Brit Bk News, Bulletin de L'Institute Pasteur, Calif. Libn., Canad Lib Assn. Bull, Chem Ind, Chem in Canada;

DC Lib, Dok Med U Biol, Dokumentation, Dyer, Electronics, Faserforsch u Textiltech,

Fed Bar J, Ill Lib, Indexer, Indian Libn, Inst Petroleum, Inst Radio Eng Proc, J Forestry, J Mondial de Pharm, J Roy Inst Chem:

La Ricerca Scientifica, Lib, Lib Assn Rec, Lib Binder, Lib Cong Q J Cur Acq, Liberty Herald, Libri, Loydia, LLU Trans Bul, Med Lib Assn Bul, Meteorol Abs & Bib, Microcard Bul, Mod Phot, Nachr Dok;

Ohio Lib Assn Bul, Petroleum Press Service, Rev Doc, SLA Bus & Fin Div Bul, SLA Pitts Chap Bul, SLA S Calif Chap Bul, SLA Texas Chap Bul, Systems, The Pioneer, Tid Dok, UNESCO Bul Lib.

PHARMACEUTICAL SECTION

Louise C. Lage, Chairman, reports that Winifred Sewell, SLA First Vice-President and President-elect attended the meeting of the Commission for Documentation of the International Pharmaceutical Federation (FIP) in Berne, Switzerland on September 3-4. At the meeting plans were worked out for a fortnightly bulletin of abstracts of pharmaceutical importance. The estimated 6000 abstracts will be published in English with two indexes appearing each year. A prospectus for the bulletin will be issued in Spring 1960 to determine how much support can be expected.

Miss Alberta Brown retired from the Upjohn Company in July 1959 and is serving as a library consultant with Raytheon Manufacturing.

Miss Irene M. Strieby, retired from Eli Lilly, will serve as Indiana's Executive Director of National Library Week in 1960.

A review of the committee and other assignments made to Pharmaceutical Section members explains why this section is so active and accomplishes so much. Judging from the roster everyone, including the next president of SLA, has a job in the section, and several have two or three assignments.

BOSTON CHAPTER

The Boston Chapter's Science Technology Division group has held two meetings this year—1959-60—with two more to come. The first of these was at Avco's new Research and Development Facility in Wilmington, Massachusetts, where Mrs. Henrietta Page was host librarian. A briefing session and moving picture outlining Avco's fields of interest pre-

(Continued on Page 27)

SCIENCE-TECHNOLOGY SERIALS

Compiled by

ANDREW S. GLICK



ABSTRACTS JOURNAL OF METALLURGY. PART B.

V. 1, No. 1, Nov. 1959, monthly, \$50.00, Pergamon Press, New York.

Translation of the Russian REFERATIUNYI ZHURNAL which abstracts world-wide scientific and technical information. Only abstracts originating in the U. S. S. R., the Satellite countries, and China will be translated. Complements Part A already noted in SCI-TECH NEWS, Vol. 13, No. 3.

THE AMERICAN BOOK PUBLISHERS RECORD

V. 1, No. 1, Feb. 1960, monthly, \$10.00, R. R. Bowker, New York 36.

Cumulation of listings in *Publishers Weekly*, arranged by Dewey decimal classification number and indexed by author and title. The use of L. C. subject headings in the subject arrangement will be of great value in book, selection, reference and catalog work.

BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS

V. 1, No. 1, July 1959, monthly, \$12.00, Academic Press, New York.

Initiated to meet the need for rapid dissemination of information in all areas of experimental biology. Will afford an opportunity for rapid publication of timely and significant observations in the form of short but well documented communications.

CLINICAL PHARMACOLOGY AND THERAPEUTICS

V. 1, No. 1, Jan. 1960, bi-monthly, \$12.50, C. V. Mosby, St. Louis 3, Missouri.

CONTEMPORARY PHYSICS

V. 1, No. 1, October 1959, bi-monthly, \$4.00 per volume, Taylor & Francis, Ltd., London, England.

Will publish review articles on various aspects of physics, keeping current on modern developments. Papers will be descriptive surveys of advances in physics, relatively elementary interpretations of theoretical matters, and papers on the historical, philosophical, and educational aspects of the subject.

Will also contain essay and book reviews.

INDUSTRIAL LABORATOIRES

Beginning Jan. 1960, the publication will change title to the *MAGAZINE OF RESEARCH DEVELOPMENT*.

INTERNATIONAL INSTRUMENT REVIEW

V. 1, No. 6, July 1959, monthly, \$7.00, London W. C. 2 England.

Includes reviews of new instruments, brief news of the international instrument, electronics and automation industry. Also contains details of new patents, new companies, new literature, and information of the application of instruments, electronics, and automation equipment. Written in German, French and Spanish.

INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER

V. 1, No. 1, Oct. 1959, bi-monthly, \$20.00, Pergamon Press, New York.

To provide a central publication for exchange of basic ideas in heat and mass transfer between research workers and engineers throughout the world. Emphasis will be placed on original research, both analytical and experimental of permanent interest to researchers and engineers. Special review articles will be published when outstanding new advances are made in existing areas of heat and mass transfer.

Will include an international bibliography of recent papers on the subject listed by author, title, and source in each issue. Reviews of books will be made.

INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES

V. 1, No. 1, Nov. 1959, quarterly, \$17.00, Pergamon Press, New York.

Original and review papers which contribute to the understanding of the mechanical and civil engineering sciences, or give insight into engineering practices and processes. Written in English. The journal will encourage contributions from all parts of the world. A special feature will be translations of outstanding papers from Russia.

JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS

V. 1, No. 1, March 1960, quarterly, \$16.00, Academic Press, New York.

Will provide a medium for the rapid publication of carefully selected mathematical papers treating classical analysis and its manifold applications.

JOURNAL OF MATHEMATICAL PHYSICS

V. 1, No. 1, Feb. 1960, bi-monthly, \$10.00, American Institute of Physics, New York.

Journal will report new mathematical methods for the solution of physical problems as well as original research.

JOURNAL OF SPACE FLIGHT

Publication turned over to the American Aeronautical Federation as its national periodical. Formerly published by Chicago Rocket Society.

MATHEMATICAL TABLES AND OTHER AIDS TO COMPUTATION

Changed to *Mathematics of Computation* beginning January 1960.

MATHEMATICS OF COMPUTATION

Name changed from *MATHEMATICAL TABLES AND OTHER AIDS TO COMPUTATION*. Will continue as quarterly at \$8.00 per year.

PERSPECTIVE (BRITISH)

V. 1, No. 1, March 1959, quarterly, \$7.50, Local Press, New York.

A review of progress in photography, cineatography, sound and image recording. To serve members of the photographic and annuallary industries.

DOCUMENTATION DIGEST

Compiled by Chemistry Section Members

LESLIE B. POLAND, Editor



Documentation Digest is resumed by courtesy of the Chemistry Section under the direction of Leslie B. Poland, Chairman. The abstracts were compiled by the participating Section member indicated by the initials following the abstract. The contributors to this issue include the following:

MB Marguerite Bebbington, International Nickel Company, Inc.; REB R. E. Burton, Union Carbide Metals Company; BC Bertha Chance, Emery Industries, Inc.; AMC Anna M. Coleman, Dow Corning Corporation; RJH Robert J. Havlik, Linde Company; JH Janet Hollander, Dixie Cup.

MWI Margaret W. Imbrie, E. I. du Pont de Nemours Company; MJ Marilyn Johnson, Shell Development Company; MEM Mary E. Mitchell, E. I. du Pont de Nemours & Company; VM Vittoria Mondolfo, University of Chicago Library; MM Marguerite Moran, Metal & Thermit Corporation; AVN Alice V. Neil, General Electric Company; MCP M. Constance Parche, Carborundum Company.

DBS Dorothy B. Skau, U. S. D. A. Southern Research Lab.; PS Patricia Snyder, Owens-Illinois Glass Company; MES Mira E. Spinning, Bristol Laboratories Inc.; EBS (Miss) E. B. Streeter, Wallerstein Company; MT Maria Tashima, Shell Development Company; BBW Blanche B. White, W. R. Grace & Company.

ABSTRACTING AND INDEXING

1. Fifty foreign languages at Chemical Abstracts.

F. Heumann and B. Bernays. J. CHEM. EDUC. 36: 478-482 Oct. 1959.

Methods used at Chemical Abstracts for dealing with foreign languages offer suggestions for problems in acquisition, editing, author, and subject indexing of foreign language articles. A sampling of the 1958 volume shows that language frequency is now English 50%, Russian 17%, German 10%, Japanese 6%, French 5.5%. MCP

BIBLIOGRAPHY

2. Guide to report literature.

D. R. Pfoutz. LIB. J. 84(19):3363-3366 Nov. 1, 1959.

Research reports on work done for the government—once "strictly confidential"—are now accessible and prove valuable sources of scientific and technical information. The author discusses the role of the Office of Technical Services and depository libraries in making this material available. —EBS

BOOK TRADE

3. Binding time for periodicals.

C. W. Hanson. ASLIB PROC. 11(10):237-239 Oct. 1959.

Survey conducted in Great Britain revealed that the median time for material away from the library was 65 days. —MT

4. Paperbacks come of age.

F. Lewis. LIB. J. 84(16):2557-2559 Sept. 15, 1959.

One publisher's account (Pocket Books, Inc.) of how paperbacks can serve a library's needs. —EBS

5. SACAP — a new service for improved selection, acquisition, cataloging and processing.

A. Brody. LIB. J. 84(22):3828-3830 Dec. 15, 1959.

The president of Bro-Dart Industries outlines a program to cope with the problem of the high cost of acquiring and processing new books. This program, involving the cooperation of the R. R. Bowker Company and the Processing Department of the Library of Congress, is being developed in two stages: I covers selection and acquisition; II concerns cataloging and processing. This subscription service would include Bro-Dart multiple copy order forms and special catalog cards which would be paper offset masters. —EBS

CATALOGING AND CLASSIFICATION

6. Cataloging and classification of cine film at the Royal Aircraft Establishment.

G. Growther. ASLIB PROC. 11(7):179-187 July 1959.

Special handling, classification (UDC) and cataloging of analytical, research and record films are described. —MT

7. Dividing a catalogue in Western Australia.

A. Ellis. LIB. RESOURCES & TECH. SERV. 3(4):289-292 Fall 1959.

Integration of several library catalogs and concurrent division into author-title and subject catalogs for the Library Board of Western Australia, Perth are described. —MT

8. Extension of unit card concept.

R. E. Kingery. LIB. J. 84(19):3381-3383 Nov. 1, 1959.

NYPL includes administrative information and operational instructions as part of unit catalog card copy. This "designator system" covers acquisition and cataloging data concerning continuations, entries in various catalogs, authority information for personal and corporate entries, transferring and filing instructions. The system appears to have potential in any large technical processes unit when a number of different catalogus must be maintained. —EBS

9. Fluidity in book location in relation to catalog records in university libraries.
R. H. Muller. LIB. RESOURCES & TECH. SERV. 3(4):292-299 Fall 1959.

A survey of the 17 largest university libraries revealed various patterns of location records in the card catalog. Omission of locations from secondary entries may result in economies but inconvenience to the user.—MT

10. Map cataloging: Inventory and prospect.
W. M. Woods. LIB. RESOURCES & TECH. SERV. 3(4):257-273 Fall 1959.

The history and current status of map cataloging are reviewed. Bibliography.—MT

11. Sorting backwards.

D. W. Johnson. LIB. RESOURCES & TECH. SERV. 3(4):300-310 Fall 1959.

Author gives rules for pre-filing sorting methods.—MT

12. Terminology, form, specificity and the syndetic structure of subject heading for English literature.

O. L. Lilly, D.L.S. dissertation, Columbia University, 1959.

Information is presented on the inherent characteristics of the alphabetical subject-heading system.—BC

13. Toward a procedure for logically cataloging knowledge.

L. E. Allen. AM. DOC. 10(4):296-315 Oct. 1959.

Suggests an approach toward a systematic method for cataloging all written knowledge. Method has two ordering principles: (1) ordering by logical form and (2) alphabetical ordering. Can be used to construct catalogs of particular fields, catalogs cutting across traditional fields or a catalogue of the entire body of written knowledge.—MEM

COOPERATION BETWEEN LIBRARIES

14. Special librarians need not be parasites.

E. Ferguson. LIB. J. 84(19):3372-3375 Nov. 1, 1959.

A discussion of interlibrary loan cooperation between special libraries and the public library in a North Carolina community and commentary on an article by S. Sass (SP. LIB., April 1959, p. 149-154.) —EBS

DOCUMENTARY REPRODUCTION

15. Device reads print fast.

CHEM & ENG. N. 37(27):64 July 1959.

The print reader MX-201, a new scanning device developed by Intelligent Machines Research Corp. and Rome Air Development Center, converts typed pages into punched paper tape at a rate of 200 characters a second. The MX-201 can read letters, numerals, and punctuation marks simultaneously.—AMC

16. Film textbook builds talent pool at Armeo.

BSNS. W. No. 1584-69 Jan. 9, 1960.

Probably the first management course to be put on film. A unique method of teaching and a new use for documentation.—AVM

17. Flat-bed scanner uses flying spot of light.

PRODUCT ENG. 30(31):44-45 Aug. 3, 1959.

Description of a new facsimile transmitter designed by the Western Union Telegraph Co., NYC.—RJH

18. GE's thermoplastic pictures recorder gives instant playback.

BSNS. W. No. 1583:74 Jan. 2, 1960.

A new electronic technique of recording and filming which will have an effect on motion pictures, television and data processing.—AVN

19. High-speed terminal printer.

K. M. Kiel. ELEC. ENG. 78(10):1026-1029 Oct. 1959.

This is a description of a high-speed (3000 words per minute) printer for data processing systems. Developed for the U. S. Signal Corps Laboratories by Burroughs, the device uses electrostatic printing similar in principle to that used in the Xerox process. The equipment is to be used to keep "print-out" abreast of the speed of the computer. It is suggested that speeds of 30,000 wpm may be obtained using a full-scale device and that this will permit new approaches to the design of high-speed low-cost memory systems.—REB

20. Microfilm printing time cut from hours to minutes.

STEEL 145(23):158-9 Dec. 7, 1959.

Automated photocopy equipment (as developed by Photostat Corp. for Heald Machine Co.) rapidly produces single or multiple prints from microfilm originals. Same machine copies documents and engineering prints from full size originals.—MM

21. The micropaque offers unique advantages in handling and economy.

V. D. Tate. PHOTO METHODS FOR INDUSTRY 2(7):28, 30, 76 July 1959.

Lists the advantages of micropaqués over film rolls or strips and discusses the different types of micropaqués on cards and strip paper. Also mentions several types of readers. A recent application is in supplying telephone numbers to "information" operators.—MEM

22. New process enables Navy to rehabilitate drawings.

P. Grossman. IND. PHOT. 8(9):86-87 Sept. 1959.

The Micro-Master process is being used to film all current Bureau of Yards and Docks engineering drawings as they are completed. This will preserve them for use in future renovation, remodeling, etc. Old drawings are being redrawn where necessary and copied.—MEM

23. Personal microfilms: best way to get your feet wet, brain washed.

V. D. Tate. PHOTO METHODS FOR INDUSTRY 2(12):68-70, 77 Dec. 1959.

Describes apparatus adapted by professor to microfilm books and manuscripts available only in Peru, where commercial facilities do not exist. Microfilming widely scattered information is a way to build up personal files in field of interest.—MEM

24. Photo typesetting units, wrap-around plates pace advances in printing equipment.

PRODUCT ENG. 30(40):25 Sept. 28, 1959.

A description of new photo typesetting units and wrap-around and photopolymer plates which were exhibited at the recent National Graphic Arts Exposition.—RJH

25. A quarter-century's progress in engineering reproduction.

V. D. Tate. PHOTO METHODS FOR INDUSTRY 2(8):24, 26 Aug. 1959.

The experience gained by the U. S. Defense Department in the use of microfilm for distributing copies of

engineering specifications to the locations where needed has led to the drafting of a new Defense Department specification for 35 mm microfilm reproductions of engineering drawings. A joint committee of representatives of Army, Navy, Air Force and 13 national associations met on July 28-30, 1959 to discuss this specification. Principles are also outlined for effective use of microfilmed engineering drawings in industry. —MEM

26. Standards for microfilming engineering drawings.

W. Mackay. IND. PHOT. 8(10):86-87 Oct. 1959.

Standards for microfilming engineering drawings are developed in the Armed Services and in the American Standards Association. Article discusses factors to be considered in deciding whether to (1) acquire equipment and do microfilming internally; or (2) have contractor microfilm at the drawing location; or (3) have contractor microfilm on his premises. —MEM

DOCUMENTATION — GENERAL

27. Armed Service Technical Information Agency. Office of Technical Services Correlation Index of Technical Reports. PB 151,576 S.

Washington, D. C., Office of Technical Services, March 1958. 186 p. \$3.00

Unclassified ASTIA Document numbers from AD-1 to AD-75,000 are listed with the corresponding PB number and price, together with instructions for ordering report. —BC

28. British patent law and practice.

W. V. Higgs, J. PAT. OFF. SOC., 41(8): 562-573 1959.

—BC

29. Constitutional basis of our patent laws.

H. A. Burgess, J. PAT. OFF. SOC., 41(8): 515-519 1959.

Patent laws are implicit in the terms of the Constitutional provision that the language be clear and concise as well as have ample meaning. —BC

30. Digest of Soviet technology.

NATURE 184(4683):320 Aug. 1, 1959.

Description and evaluation of the Digest of Soviet Technology, a new "express" type information service covering Soviet Union and Eastern European literature, which is being published by Engineering Information Service, Ltd. —RJH

31. Frankfurt and Leipzig: Two national bibliographical centers reflect Germany's political division.

Marga Franck. WILSON LIB. BULL. 34(4):264-265 Dec. 1959.

Deutsche Bibliothek was founded in Frankfurt in 1946 with the consent of the American military government. Members of the German publishers' and booksellers' association in the Western zones deposit one copy of each publication in Frankfurt's Deutsche Bibliothek and another in the Deutsch Bucherei in Leipzig. Both bibliographies, the Deutsche Nationalbibliographie (Leipzig), and the Deutsche Bibliographie, published by the Deutsche Bibliothek, list, in addition to all books, pamphlets, and other printed material published in Germany (East and West) everything published in the German language anywhere else in the world. —PS

32. Pendency of patent applications. Commentaria.

J. PAT. OFF. SOC. 41(7):510-512 1959.

The period of pendency of patent applications of over 6000 original U. S. patents issued in 1957 and 1958 was studied and charted. The medium pendency was 38.5 months. Over 90% of all patents had a pendency period of less than five years. —BC

33. The professional man and the obligation of authorship.

M. Williams. IND. LAB. 10(12):33-39 Dec. 1959.

Discusses reasons why scientists and engineers should write and publish papers on work they have done.

34. A quantitative study of patent performance reports to top management.

P. S. Schmidt, J. PAT. OFF. SOC. 41(9): 606-614 1959.

This article describes the results of a study on the type, frequency and contents of reports rendered by the operating heads of patent organizations to top management. —BC

35. Some notes on oral communications at scientific meetings.

A. L. Bacharach, CHEM. & IND. No. 40: 1244-5 Oct. 3, 1959.

The first principles in the oral presentation of scientific papers are discussed: (1) Do not talk beyond allotted period. (2) Project voice to be heard in entire room. (3) Do not read paper. (4) Select slides carefully and keep to minimum. (5) Do not obstruct view to slides. (6) Keep historical background and pleasantries to a minimum. —BC

36. Where ideas go begging.

PRODUCT ENG. 30(28):36-9 July 13, 1959.

A pictorial description of the U. S. Patent Office and its services. —RJH

INFORMATION STORAGE AND RETRIEVAL

37. ASM's electronic library speeds tech literature research.

T. M. Rohan. IRON AGE, 184(24):66-7 Dec. 10, 1959.

Low-cost service offered by American Society for Metals in cooperation with the Documentation Center of Western Reserve Univ. makes metallurgical data on a given topic available in seconds instead of days. The electronic machine searches 100,000 tech papers per hour. Three types of services are offered: bibliographical search, current awareness and generic searches. —MM

38. CA Service gets NSF grants.

CHEM. & ENG. N. 37(50):90 Dec. 14, 1959.

The National Science Foundation has made three grants to Chem. Abs. Service for research: on ways to "exploit more fully the chemical information the service collects . . .", \$69,800; on the semantics of chemical literature, \$57,900; on the value of a permuted index of publication titles, \$150,000. The permuted index is to be published experimentally for 4 months. NSF has also granted \$159,200 to Western Reserve University for a program to evaluate methods developed for automatic processing of metallurgical literature. —AMC

39. Code for Alphabetical Index for Punched Cards.

S. Aronoff. J. CHEM. EDUC. 36:581 Nov. 1959.

A punched code is given which requires only four pairs of holes, provides 8 direct reading letters and no more than two punches for any letter. It is recommended as being a space saver and more easily remembered than the OIECB method. —MCP

40. Dial HayStaq in chemical literature search.

IND. LAB. 10(12):86 Dec. 1959.

National Bureau of Standards and the Patent Office developed a program for the automatic searching of patents by an electronic computer. This program, known as HayStaq, has resulted in an experimental system designed for the storage, search, and retrieval of technical literature, particularly in the field of chemistry. —JH

41. "Handwriting reader" has a 10-word vocabulary.

ELEC. ENG. 78(2):1241-1242 Dec. 1959

Bell Telephone Laboratories has built a small device that reads handwritten words and has a 10-word vocabulary, zero through nine. Designed to show the feasibility of machines to be used to translate information into machine language by cards, tape, or typewriter, the machine has scored 97% accuracy in a test of 1000 words written by 20 persons. —REB

42. High-speed document sorter: a case history of a new product development.

I. M. Sheaffer, Jr., RESEARCH MANAGEMENT 2(3):169-184 Autumn 1959.

Case history of the Burroughs High-Speed Document Sorter-Reader which automatically reads and sorts magnetic-character bank documents at high speed. —MM

43. Locating unclassified government - sponsored research reports.

PHYS. TODAY, 12(12):42, 44 Dec. 1959.

Chiefly a discussion of the emphasis which government agencies are putting on availability and procurement of unpublished research. —AVN

44. Metals documentation — a fast new problem-solving service.

Marjorie R. Hyslop. METAL PROG. 76(5):123-128 Nov. '59.

The Metals Documentation Service of The American Society for Metals inaugurated in January, 1960, is a cumulation of four years of research and pilot plant experience in the indexing and searching of metallurgical literature by machine. It will provide abstracts of all current publications pertaining to subscriber's problems. —PS

45. A new use for microfilm.

D. W. McArthur. IRON AGE. 184(18):91 Oct. 29, 1959.

D. W. McArthur, general manager of Filmsort Col. developed a method for using microfilm and punched cards for recording engineering drawings. —MM

46. A photo-magnetic system for document and information retrieval.

P. James. AM. DOC. 10(4):286-295 Oct. 1959.

Describes a system which associates a film strip for document storage (fixed records) and a magnetic tape for the storage of information in digital form (alter-

able data). File can be readily updated by changes to the magnetic tape. Indexing codes can be changed without destruction of the film portion of the principal record. Furnishes single or multiple copies of any part or all of a document. —MEM

47. Principles of machine and system design with special reference to the indexing and analysis of historical literature.

J. W. Perry and J. L. Melton. AM. DOC. 10(4):278-285 Oct. 1959.

Explains a system for coding standard abstracts which can be recorded on magnetic tapes and scanned by searching mechanisms. Examples are given in locating the answers to two sample questions. —MEM

48. A puzzle computer.

T. J. Fletcher. DISCOVERY 20(9):388-389 Sept. 1959.

A computer need not be the complicated electronic device which is usually imagined. It can be simple enough for anyone to make at home. This gives examples of the uses of punched cards for the layman. —EBS

49. Research by Punch Card.

CHEM. & ENG. N, 37(39):122 Sept. 28, 1959.

A report of a paper given in the Chem. Lit. Div. of the ACS at the Atlantic City Meeting, in which the use of IBM electronic equipment to correlate melting and boiling points and thermal stabilities of 22,250 inorganic and metallo-organic compounds with their chemical structures was described. —AMC

50. Systematic research.

F. P. Vance. IND. & ENG. CHEM. 51(12):52A-54A, 56A Dec. 1959.

Research effort can be systematized via mathematical statistics. An ideal organization provides interchange of talents and information between physical scientists/engineers and mathematical statisticians. Examples are described of programs carried out according to such a scheme. —EBS

51. To measure progress in a service group.

R. F. Koenig. PRODUCT ENG. 30(36):33-4. Sept. 7, 1959.

Use of a data-processing machine by a materials and processes group to help management measure progress of projects and forecast future work loads. —RJH

LIBRARY ADMINISTRATION

52. College and research library contributions to adult education.

A. T. Hamlin. LIBRARY TRENDS 8(1):51-61 July 1959.

Although there is a distinction between the services of public libraries and academic libraries, it will diminish with the expansion of higher education. Cooperation in meeting educational needs of all adults will be required of all libraries — along with the increased support of the community in financial matters. —PS

53. Current trends in newly developing countries.

W. J. Plumbe, issue editor. LIBRARY TRENDS 8(2): Oct. 1959. Entire issue.

Articles discuss: patterns of library service; education and training of librarians; library buildings; preservation of library materials in tropical countries; provision of vernacular literature; and, bibliography of newly developed areas. Areas covered are: Asia, the Pacific Islands, Africa, the Middle East, Latin

America, the Caribbean, British Commonwealth countries, and the Near East. —PS

54. History of the Columbia University Library, 1876-1926.

W. B. Linderman, Ph.D. dissertation, Columbia University, 1959.

The history of the title library is covered with emphasis on such topics as governmental organization, growth of resources, services, related problems of space and centralization versus dispersal of collections, integration of library in Columbia educational program and with resources outside the university, personnel policies, and administrative systems. —BC

55. Jet age technical library.

G. Kelton. LIB. J. 84(14):2253-2256 Aug. 1959.

Management's viewpoint on how technical libraries can and must engage in a greater variety of activities to the mutual advantage of all concerned. —EBS

56. The library school of the future.

J. F. Harvey. LIB. J. 84(15):2433-2436 Sept. 1, 1959.

The dean of the School of Library Science, Drexel Institute of Technology analyzes the potentialities and the weaknesses of the field and points up areas for concentration. —EBS

57. Order records and methods: A workshop. LIB. RESOURCES & TECH. SERV. 3(4): 278-288 Fall 1959.

Summary of workshop sponsored at the University of Southern California School of Library Science, April 14, 1959. Participants represented public, university and school libraries. —MT

58. Research and evaluation needs in library adult education.

Eleanor Phinney. LIBRARY TRENDS 8(1):72-81 July 1959.

Main areas of needed research concern: further definition of the library's purposes, scope, and role; guidance to the patron; effects of reading; and, evaluation of services. Suitable research approaches are outlined. References studied include "an overview of adult education research," by E. deS. Brummer et al, and personal communication from M. S. Knowles, formerly Executive Director of the Adult Education Association of the U. S. A. —PS

59. Science and the library services in Britain. NATURE 184(4697):1455-56 Nov. 7, 1959.

Comments on three papers presented at the Library Association annual conference in Torquay, England, September 22-25. The papers are, "Past, Present and Future of the Printed Page," by Prof. Lancelot Hogben, "Reflections on the Roberts' Report," a report on changes in administrative arrangements of public library service by Sir Sidney Roberts, and "The Public Library as a Major Instrument of Education," by Al-derman F. J. Stott. —RJH

LIBRARY EDUCATION AND TRAINING

60. The forward look in recruitment and library education.

K. B. Stebbins. STECHERT-HAFNER BK. NEWS 14(2):17-19 Oct. 1959.

This article is condensed from a talk given before the Congress of Librarians, February, 1959. The author describes 11 positive steps that can be taken to aid recruitment for the profession. —EBS

61. Leningrad State Library Institute.

C. D. Kent. LIB. J. 84(20):3528-3530 Nov. 15, 1959.

A report on a Russian library training program.—EBS

62. Teaching Machines.

J. H. Day. J. CHEM. EDUC. 36: 591-595 Dec. 1959.

A number of teaching machines are described. In one, incomplete sentences are printed on a disc and a multiple response is offered. The student punches the card and the machine indicates whether or not the choice is correct and why. The punched card can provide a method for scoring. Four references. —MCP

63. Training Japanese librarians.

R. Sieben-Morgen. LIB. J. 84(20):3525-3527 Nov. 15, 1959.

The Fifth Air Force has several types of libraries in the greater-Tokyo area, and as an assist to Japanese librarianship they invite the faculty and students of the two library schools to use the Air Force libraries as training ground. —EBS

PROFESSIONAL ASSOCIATIONS AND SOCIETIES

64. ALA-CLA liaison.

E. H. Morton. STECHERT-HAFNER BK. NEWS 14(3):29-31 Nov. 1959.

A sketch of past, present and future cooperation between these two associations. —EBS

65. Canadian Library Association.

R. H. Blackburn. STECHERT-HAFNER BK. NEWS 14(3):29-30 Nov. 1959.

A brief sketch of the Association's aims and projects. —EBS

SPECIAL LIBRARIES AND INFORMATION SERVICES

66. Information for industry.

L. Taylor. ASLIB. PROC. 11(11):268-300 Nov. 1959.

Author considers usefulness, personnel and material requirements of a small industrial technical information organization. Sources of information are also discussed. —MT

67. The Japan Information Center of Science and Technology and its activities.

Kozi Abe. ASLIB PROC. 11(11):301-304 Nov. 1959.

JICTS is a non-profit center supported by government and industry. The center issues publications and offers photocopying and translating services to overseas users. —MT

68. Library of the Rocky Mountain Laboratory.

A. P. Collins. STECHERT-HAFNER BK. NEWS 14(1):1-2 Sept. 1959.

An informative sketch of the history of the Laboratory and its library by the present librarian. The library's holdings and fields of interest have developed with the laboratory's widening research program. Originally established for the study of Rocky Mountain spotted fever, the Laboratory now concerns itself with work in biochemistry, pathology, biophysics and related fields. —EBS

- 69. The Newark Business Library**
M. P. McLean. SLA N. J. CHAP. 25(2);
13-5 Oct. 1959.

Brief history and description of the services of the Newark Business Library. —MM

- 70. A new geological documentation service.**
NATURE 184(4681):153 July 18, 1959.

Describes services of the Service d'Information Geologique of the Bureau de Recherches Geologiques, Geophysiques et Minieres. About 3,500 periodicals are scanned and indexed in the field of Earth Sciences. —RJH

- 71. Organizing R/D information.**
Harold S. Sharp. IND. LAB. 10(11):70-75
Nov. 1959.

This article discusses the general use of industrial libraries, the need for them, their functions and organization. —JH

- 72. Professional opportunities in special libraries.**

SLA N. J. CHAP. BUL. 24(8):65-6 June 1959.

Description of the library and services of the Academy of Medicine of New Jersey. —MM

- 73. Scientific research in Great Britain.**
NATURE 184(4703):1897-99 Dec. 19, 1959.

Comments on the tenth annual report of the Advisory Council on Scientific Policy covering the year 1958-59 are critical to the Councils apparent belief that its responsibility to schemes such as the National Lending Library of Science and Technology are satisfactorily concluded. —RJH

- 74. Soviet scientific information system.**
SCIENCE 130(3385):1324-1325 Nov. 13, 1959.

The Department of Scientific & Technical Information is responsible for all Soviet scientific and technical information centers. These regional units, operating quite like the U. S. organizations, supply abstracts, translations, literature searching, and bibliographical services. —VM

- 75. Streamlined special library.**
M. E. Madden. LIB. J. 84(14):2257-2260
Aug. 1959.

An account of how the library of the Inorganic Division Research Laboratory, Monsanto Chemical Co. in St. Louis was reorganized. End result—less staff, but better service to more patrons at lower cost. —EBS

- 76. Technical information in industry: How it is handled.**

I. M. Slade. ASLIB. PROC. 11(12):314-317
Dec. 1959.

Suggestions are given to improve technical information service by knowledge of clients needs, use of supplementary materials and current awareness. —MT

- 77. Technical information service in Germany, Luxembourg, Belgium, and Holland.**

R. Sewell. ASLIB. PROC. 11(10):240-265
Oct. 1959.

The technical information services of twenty government agencies, trade and institutional organizations and industry are described. —MT

- 78. Technological information — government responsibility?**

F. J. Van Antwerpen. CHEM. ENG. PROGR. 55(8):35 Aug. 1959.

"Would it not be logical for the chemical process industries to recognize the fact that information services are a modern necessity and, instead of depending on the Government, to see to it that funds are made available for such services?" —AMC

- 79. The Weapons Research Division Library and Information Service.**

R. A. Wall. ASLIB. PROC. 11(11):277-285 Nov. 1959.

Description of an aircraft and missiles library. Classified UDC catalog is used. —MT

TECHNICAL PROCESSES

- 80. Farmington redivivus: ten years of coordinated foreign book procurement in the U. S.**

R. Vosper. ASLIB. PROC. 11(12):327-334
Dec. 1959.

The cooperative acquisition of foreign materials by sixty American libraries is reviewed since its adoption in 1947. —MT

TECHNICAL WRITING AND EDITING

- 81. 8 steps to better engineering writing.**

R. M. Koff. PRODUCTS ENG. 30(36-44),
51) Sept. 7, 14, 21, 28, Oct. 5, 12, 19, 26 and
Dec. 14, 1959.

Advice to the engineer on technical writing which ranges from sentence structure to illustrations. A ninth article contains criticism of the series which were sent in by readers. —RJH

TECHNICAL WRITING — EDITING

- 82. Problems in technical writing.**

J. W. Godfrey. ASLIB. PROC. 11(8/9):
199-206 Aug./Sept. 1959.

Style, checking for accuracy, illustrations, and reproduction methods are considered for conveying information from the source to the reader. —MT

- 83. Technical editing.**

A. B. Robertson. ASLIB. PROC. 11(8/9):
207-212 Aug./Sept. 1959.

The origin of technical articles and consideration of the reader audience are described with helpful suggestions about press releases, illustrations, selection, and editing. —MT

- 84. Technical writing as a career: producing the personnel.**

H. R. Hockley. ASLIB. PROC. 11(8/9):
219-29 Aug./Sept. 1959.

Qualification requirements and standards for technical writers in Great Britain are presented. —MT

TRANSLATION

- 85. Braille translation by computer.**

DISCOVERY 20(9):377 Sept. 1959.

IBM mathematicians, in co-operation with the American Printing House for the Blind, have developed a process for translating printed text into braille using the IBM 704. It can convert a 300 page book in one hour — a job that would take the skilled translators more than six days. —EBS

- 86. Japanese organic chemical nomenclature. Problems of translation and transliteration.**

Y. Urushibara and M. Nakamura. J. CHEM. EDUC. 36: 482-485 Oct. 1959.

—MCP

(Continued on Page 30)

Section, Chapter & Committee News

(Continued From Page 19)

ceded a visit to the library, and dinner in the company dining room. The second meeting was held, as are most meetings, at M. I. T.'s Library Lounge, with Mr. Russell J. Bowen of Arthur D. Little, Inc. as guest speaker. Mr. Bowen spoke concerning his trip to Russia last summer with a group of librarians, and illustrated his talk with colored slides. Cocktails and dinner followed at the M. I. T. Faculty Club.

The Boston group has three projects under way at the present time. It is working on a revision of its **Union List of Serial Holdings in Fourteen Industrial Libraries**. So great has been the growth in numbers of industrial libraries in Greater Boston since 1956, that the present list is no longer adequate or representative. This tool enables us to borrow from each other and thus be less "parasitical" on such libraries as M. I. T. and Harvard, which no longer lend periodicals.

Plans are also under way for a series of four two-hour lecture-discussions for library assistants in affiliated libraries in Greater Boston. This series will be held in the spring. The topics selected for the four sessions are Books; Periodicals; Miscellaneous Forms of Literature; and the Utilization of This Literature in Service to the Library's "Public." In addition to actual knowledge imparted and shared it is hoped the series will:

1. Make our "subprofessional" staffs feel more a part of the library profession as a whole and Special Libraries Association in particular — even though we cannot offer them any form of membership in the latter.

2. Among the participants will be some who will be challenged to continue and become professional librarians.

The third project has reached the "appointment of committee" stage, but promises much for the future. The group is "exploring the problem of cooperation with regard to back files of journals." This could either take the form of a desopitary library or a mutual agreement as to responsibility for holding of journals. Further areas of cooperation may also be explored.

ELIZABETH H. WEEKS,
Secretary-Treasurer.

NEW JERSEY CHAPTER

Requests for subscriptions to the Union List of Serials in New Jersey have come from as far away as Minneapolis, Los Alamos, San Antonio and Boston, proving that it is as valuable a tool to librarians from afar as it is to the special librarians of New Jersey. This project is an undertaking of the New Jersey Chapter of Special Libraries and, through a program of constant revision, it is hoped that

it can be continued indefinitely. One letter of the alphabet is mailed monthly so that the more than one hundred subscribers, at the end of the two years, will have a complete list of local holdings.

Orders are still being accepted and should be addressed to Dr. F. E. McKenna, Air Reduction Co., Inc., Murray Hill, N. J. The rate is \$15.50 per year.

NEW YORK CHAPTER

The exchange of scientific publications between librarians in this country and the U. S. S. R. was the subject of a dinner meeting held on August 6, 1959 at the Chemists' Club, sponsored by the Science-Technology Group, New York Chapter, Special Libraries Association. Mr. V. Orlov, Scientific Secretary of the Lenin State Library in Moscow and Dr. V. Vorobiev, Russian Physician-Biochemist, were the guest speakers at this discussion on problems common to libraries in both countries. Abstracting of periodicals is estimated to be "at least six months behind" in the *Referativnyi Zhurnal* and indexing of scientific publications is no further advanced than in our own **Chemical Abstracts**. A significant development in Russian documentation is the work now being done on the subject indexes to the *Referativnyi Zhurnal*. The program of exchange was generally encouraged, particularly between libraries in the same fields of interest. Dr. Frank E. McKenna, Supervisor, Information Center, Air Reduction Co., Inc., acted as moderator for this informative discussion. Miss Frances M. Stratton, Assistant Librarian, Lederle Laboratories Division, American Cyanamid Co. was Chairman of the meeting.

A joint meeting of the New Jersey Chapter and the Science-Technology Group, New York Chapter, was held on February 2nd at the Princeton Inn, Princeton, New Jersey. The program of the meeting was concerned with Soviet literature. Speakers included Mr. B. I. Gorokhoff, Library of Congress Slavic and Central European Division, who discussed technical publishing in the U. S. S. R., Mr. Allen Kent, Associate Director of Center for Documentation and Communication Research, Western Reserve University, who talked on documentation practices in the U. S. S. R., and Mr. G. Miles Conrad, Director of **Biological Abstracts**, who reported on a study tour of the U. S. S. R. All-Union Institute of Scientific and Technical Information.

OAK RIDGE CHAPTER

An evening meeting held in the Oak Ridge Institute of Nuclear Studies new administration building January 29, 1960 was devoted to a panel discussion on the topic "What do we want in an employee?" The panel moderator was Emmett McGeever, Science Technology Librarian, University of Tennessee. Gordon Randall spoke on the personal characteristics,

Evelyn Levine on educational background, Paul Postel on unusual abilities and the employment to which they could be put, and Marian Garber covered recruitment.

TEXAS CHAPTER

February 19, 1960, in Dallas, Texas, a forum on Abstracting and Indexing of the Petroleum Exploration and Production Literature was jointly sponsored by Petroleum Sections of SLA, the American Petroleum Institute Advisory Committee for Fundamental Research on the Occurrence and Recovery of Petroleum, and the Texas Chapter of SLA. Dr. Burton Adkinson, national president of SLA and Head, Science Information Service, National Science Foundation, Washington, D. C., explored adequacy of abstracting and indexing in the fields of petroleum exploration and production. Marian Orgain, chairman, Public Relations Committee.

AWARDS COMMITTEE

C. K. Bauer has appointed Dr. Jolan M. Fertig, chairman of a newly created committee, to consider establishing a Sci-Tech annual award for outstanding achievement. Chairman Bauer has long felt that Sci-Tech Division with over 40% of SLA's total membership deserves greater recognition for the contribution its members have made to the Association.

In addition, the Committee will present Division recommendations to the Association on the SLA Professional Awards and Hall of Fame nominations.

NOMINATION COMMITTEE

Ralph Phelps Committee has been working on the nominations for next year's slate of officers for Sci-Tech. But as of press time, correspondence with all potential nominees had not been completed and formal announcement of names is not yet possible.

ASTIA—SCI-TECH COORDINATION COMMITTEE

The science-Technology Division is playing the role prescribed by its Chairman, C. K. Bauer. In his first message to the membership in the Fall 1959 issue of *Sci-Tech News* he said, "Sci-Tech Division . . . should act as an advisor, consultant, and authority for other official organizations in regard to science-technology information matters."

On November 24-25, the ASTIA Coordination Committee, under the leadership of Michel Friedlander met with representatives of ASTIA to explore problem areas and methods by which the Committee, and the Division it represents, might assist ASTIA in the performance of its duties.

The Sci-Tech members who attended were: Michel Friedlander, chairman, Marguerite Ritchie, Jeanne North, Herbert White, John Richter, C. K. Bauer, and G. E. Randall. From ASTIA were: Col. Dunlop, Commander; Jack Stearns, Deputy Director; Messrs. Edward

Pope, J. Heston Heald, Roy Chapman, Frank Jordan, and Mrs. Gladys Myers.

The Committee held a preliminary meeting and prepared an agenda which covered a number of questions under the general topics of ASTIA policies, document service, abstracting service and regional office service.

In his introductory remarks Col. Dunlop anticipated many of the items of the Committee's agenda. ASTIA'S objective, as explained by Col. Dunlop, is to offer the products and services it was established to produce as expeditiously and as completely as possible within the limitations of its budget, its resources, and the authorization under which it operates.

During the past two years the time cycle for filling report requests has been reduced from 26-31 to five working days for those reports carried in stock and from 41-47 to 11 working days for those which have to be re-produced. The mechanization of ASTIA, scheduled for early 1960, is expected to further reduce this time cycle. (See the article by Heston Heald elsewhere in this issue.)

In addition to providing mechanical retrieval of information, the mechanization will make it possible to cumulate the indexes to the Technical Abstract Bulletin on a quarterly and an annual basis. ASTIA indicated that the prompt publication of a numerically indexed TAB, with periodical cumulated subject source indexes, would make the library-type card catalog on its reports unnecessary.

Mr. Stearns stated that a broader initial distribution of reports would reduce the current work load on ASTIA. He recommended that librarians expand the distribution given reports issued by their organization and, in turn, request direct distribution from those agencies whose reports they otherwise have to obtain from ASTIA. To encourage this process, ASTIA has published a consolidation of its Field-of-Interest Register.

Several members of the Committee had experienced difficulty in obtaining direct distribution of reports from competitors, even when the literature does not contain proprietary material. They doubted that, even with the assistance provided by ASTIA's publication of its Field-of-Interest register and its encouragement for broader distribution, that the future would be any different than the past.

Security regulations place many restrictions on the services which ASTIA provides. The "need to know" and budget limitations prohibit the publication of a classified TAB. To the extent permitted, ASTIA includes information on classified reports in the unclassified TAB. The inability to carry titles and abstracts for such reports is recognized as undesirable but some information is considered better than none.

Various studies and proposals are now under consideration regarding ASTIA security requirements and procedures. One concerns a possible general Field-of-Interest Register for Department of Defense Contractors. Another deals with the "Via" system which is currently required of ASTIA for the distribution of secret reports. Action on these or related efforts may ameliorate some of the more undesirable aspects of the "need-to-know" limitations.

The greatest contribution which the Science-

Technology Division could make to the ASTIA program would be the promulgation of a standard for report publishers covering such things as the quality of figures, standardized bibliographic information on the title page, inclusion of abstracts and catalog cards. This standard, or code, would eradicate many of the inadequacies which now give ASTIA (along with almost all other information services) the difficulties encountered in processing reports.

THE MAIL BAG

E. F. Notaro, Bay State Periodical Service.

... The letters regarding the bidding system were something of a revelation, as I did not realize that suppliers of other commodities felt as we (journal subscription agencies) do. These opinions should have a wider circulation.

Perhaps, sometime, when you need another subject for the Mail Bag, and one which I am sure will bring the librarians in as well as the dealers and agents, is that of the unprofitable items, memberships and services which are ever increasing on library lists. How would librarians feel about a service charge when a number of these appear on their lists? Would they prefer placing these direct?

* * *

ED's NOTE: The Mail Bag is open to those who provide service to Sci-Tech librarians as well as to those who are members of the Division. The only criterion is that the material must be appropriate for inclusion according to the editor's evaluation.

The question of service charges and using a vendor to procure "unprofitable" items is a moot point. Perhaps some reader has a comment.

* * *

J. George Ort, Art Guild Bindery, Inc.

... I was quite pleased to read the various comments in response to your editorial and my Mail Bag contribution of the previous issue. It would seem that such discussions are healthy for both the customer and the contractor.

* * *

Bernard L. Foy, TVA Technical Librarian, Knoxville, Tenn.

Can you help me peddle this set of the American Society of Civil Engineers Transactions, 1913 to date, to some library? The TVA engineer to whom it belonged is retiring

and would like to place it where it would be used. It's in tip-top shape.

* * *

ED's NOTE: We can try. If you have a home for this orphan set, drop a note to Foy. He didn't quote a price, maybe it's free for transportation.

* * *

Herb White, Vice Chairman.

People are still sending me correspondence on Sci-Tech exchange at Chance-Vought in Dallas. The duplicate exchange is now George Halper's responsibility — for his address see S-TN Fall 1959 p. 5. My address is Herbert S. White, Manager, Engineering Library, IBM Corporation, Federal Systems Div., Kingston, N. Y.

* * *

ED's NOTE: Herb said it. Mind where you send your correspondence.

* * *

Marvin Schiller, Current Contents, Eugene Garfield Associates.

Gene Garfield turned over your note re our placing advertising in Sci-Tech News.

We expect to announce several new services during 1960 and will certainly advertise in your publication. Incidentally, we received 67 inquiries on our Original Article Tear Sheet services from a blurb that appeared recently in Sci-Tech News.

* * *

ED's NOTE: Marvin — Acknowledgment of those 67 inquiries is the nicest thing anyone could possibly say about S-TN, particularly in view of our advent in the selling of advertising in this issue. We hope the Eugene Garfield Associates experience with S-TN publicity continues to be favorable.

Eugene Garfield announces the incorporation of the Institute for Scientific Information to conduct a program of publication, research development, education and service.

The first product of the Institute is Index Chemicus which is advertised in this issue.

* * *

W. A. Kozumplik, Lockheed, Missile Systems Division.

... I feel sure that we will be in complete agreement that the addition of advertising services in *Sci-Tech News* will add to its professional appearance. In this regard I should like to suggest that you entertain using consecutive pagination for each volume.

* * *

ED'S NOTE: Re advertising and professional appearance — we hope so. At least it is economically becoming. Re pagination. We shall. See next issue.

* * *

Maryann Duggan, Magnolia Petroleum Co.

... I personally get a great deal of benefit from *Sci-Tech News*. It keeps me posted on Division and Section information which would otherwise be unavailable. Also the Science-Technology Serials section is very useful and the Bibliography Digest is of particularly great value to me.

ED'S NOTE: Andy, Mildred and I all thank you for the kind words and we are pleased to belatedly carry the above excerpt.

* * *

Hanna Friedenstien, Godfrey L. Cabot, Inc.

Congratulations on the improvements you are making in *Sci-Tech News*. Besides the improvement in appearance, the latest issue contains much of interest. I was particularly interested in your editorial on A. C. S. pricing policy and Dick Belknap's reply.

* * *

ED'S NOTE: We hope that future issues continue to merit your approval with the changes we are making and with those we introduce in the future. *Sci-Tech News* is a reflection of the interest and encouragement given the staff by the readers. There are many changes which can be made if only you make us aware of them.

* * *

MISCELLANEOUS MAIL

Someone who prefers anonymity to publicity sent us a marked page 124 out of C&EN for Nov. 16. It is a delightful account of Ralph E. O. Dette's synthesis of the consensus of what an ideal information system might look like. We do not wish to infringe on the copyright interests of the journal by quoting it at length. But to whet your appetite for more than a taste (and you might write the publisher to purchase the issue if it isn't on your shelves) we quote the last sentence. "All material more than 30 days old shall be removed automatically from the system, except for those items that will become significant in the light of discoveries yet unmade."

Documentation Digest

(Continued From Page 26)

87. Russian - English transliteration.

E. P. Hamp, H. C. Faberg, M. B. London, I. D. London, D. T. Ray, and G. Razran. *SCIENCE* 130(3374):482-488 Aug. 28, 1959.

Comments on G. Razran article (*SCIENCE* 129:1111, 1959) shows that a universally accepted solution is not yet at hand. —VM

88. Russian journal of inorganic chemistry.

NATURE 184(4683):319 Aug. 1, 1959.

The Chemical Society (London) is now publishing a translation of the Russian *Zhurnal Neorganicheskoi Khimii*, the only Russian journal devoted exclusively to inorganic chemistry under the title *Russian Journal of Inorganic Chemistry*. Information on, and evaluation of first issues of the journal are given. —RJH

89. Soviets gain in MT.

CHEM. & ENG. N. 37(39):122 Sept. 28, 1959.

By 1955 the Russians were translating French and English into Russian by machine, and now have translated more than 20 languages. The material includes physics, chemistry, biology, nuclear energy, electronics. Small-scale machines will be in use in many of their scientific institutes with two years. —AMC

USE OF INFORMATION

90. Patent searches pay their way in design and development.

R. H. Eshelman. *IRON AGE*. 184(10):75-7 Sept. 3, 1959.

Details value of patent searches to Dura Corp. as aids in designing improvements and developing new products. —MM

91. Role of patents in the growth of new companies.

E. H. Land, *J. PAT. OFF. SOC.* 41(7):502-509 1959.

The significance of patents to each type of company operating today is discussed. —BC

92. Streamlined card system speeds engineering changes.

R. H. Eshelman. *IRON AGE*. 184(3):106-8 July 16, 1959.

Punched card handling of engineering information at Chrysler Missile brings design improvements into production with little wasted motion. —MM

93. Technical information in industry: how it is used.

C. Scott. *ASLIB. PROC.* 11(12):318-326 Dec. 1959.

Individuals in the British electrical and electronics industry were interviewed on the use of technical information. The literature is not consulted as the primary source of information but personal contacts play an important role. —MT

For Information On Availability of World List of Aero-Space Journals, write C. K. Bauer, Scientific & Technical Information Dept., Lockheed Aircraft, Marietta, Ga.

**FLUID POWER CONTROL**

Edited by John F. Blackburn, Gerhard Reethof, and J. Lowen Shearer, all of the Massachusetts Institute of Technology. A Technology Press Book, M. I. T. 1960. 710 pages. \$17.50.

First Symposium**SURFACE EFFECTS ON SPACECRAFT MATERIALS**

Edited by Francis J. Clauss, Lockheed Aircraft Corporation. 1960. 404 pages. \$11.50.

THE AERODYNAMICS OF POWERED FLIGHT

By Robert L. Carroll, Bell Aircraft Corporation. 1960. 275 pages. \$8.50.

PRINCIPLES OF UNIT OPERATIONS

By A. S. Foust, L. A. Wenzel, C. W. Clump, L. Maus, and L. B. Anderson; all of Lehigh University. 1950. Approx. 580 pages. \$15.00.

PHOTOCHEMISTRY IN THE LIQUID AND SOLID STATES

Edited by L. J. Heidt, Massachusetts Institute of Technology, R. S. Livingston, University of Minnesota, E. Rabinowitch, University of Illinois, and F. Daniels, University of Wisconsin. 1960. Approx. 184 pages. Prob. \$5.00.

DIRECT CONVERSION OF HEAT TO ELECTRICITY

Edited by Joseph Kaye and John A. Welsh, both of the Massachusetts Institute of Technology. 1960. 384 pages. \$8.75.

THE INTERNAL-COMBUSTION ENGINE IN THEORY AND PRACTICE

Thermodynamics, Fluid Flow, Performance. Volume I

By Charles Fayette Taylor, Massachusetts Institute of Technology. 1960. Approx. 584 pages. \$16.00.

SIMPLIFIED DESIGN OF REINFORCED CONCRETE

Second Edition

By Harry Parker, University of Pennsylvania. 1960. Approx. 320 pages. \$6.50.

THE SEA OFF SOUTHERN CALIFORNIA

A Modern Habitat of Petroleum

By K. O. Emery, University of Southern California. 1960. 366 pages. \$12.50.

LITHOFACIES MAPS

An Atlas of the United States and Southern Canada

By L. L. Sloss, E. C. Dapples, and W. C. Krumbein; all of Northwestern University. 1960. In press.

SUBSURFACE MAPPING

By Margaret S. Bishop, University of Houston. 1960. 198 pages. \$5.75.

LIPIDE CHEMISTRY

By Donald J. Hanahan, University of Washington. 1960. 330 pages. \$10.00.

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SCI-TECH NEWS

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SPACE FLIGHT, Volume I: Environment and Celestial Mechanics

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